

## WHERE THE MONEY WENT

### Planning To Spend

Shortly after the September 11, 2001, terrorist attacks, Department of Defense and National Security Council officials began exploring preliminary plans for the possible invasion of Iraq. *Hard Lessons: The Iraq Reconstruction Experience* covers much of what happened regarding reconstruction planning during this period. As detailed there, significant differences unfolded among the departments about the appropriate post-war rebuilding strategy.<sup>162</sup>

The prevailing preference among Defense Department planners was to “liberate and leave.” That is, Coalition forces would topple the Saddam Hussein regime, stabilize the country, transfer power to an interim governing authority, and allow the Iraqis to manage the country’s recovery and pay for its relief and reconstruction. Policymakers viewed this general strategy as having worked reasonably well in Afghanistan. Defense sought to replicate it in Iraq.<sup>163</sup>

Defense planners expected to provide some post-conflict humanitarian and reconstruction assistance. The April 2003 \$2.475 billion Iraq Relief and Reconstruction Fund appropriation embodied this provision. No one at Defense planned for a lengthy occupation or a large relief and reconstruction program. The program in place in the early spring of 2003 anticipated a limited U.S.-funded rebuilding effort, a quick transfer of sovereignty, and the departure of U.S. troops from Iraq by September.<sup>164</sup>

As *Hard Lessons* recounts, planners from the Department of State and the U.S. Agency for International Development had a less sanguine view. They envisioned a protracted U.S. involvement, requiring the considerable commitment of U.S. resources. To that end,

USAID’s *Vision for Post-Conflict Iraq* concluded that the “complete reconstruction [of Iraq’s] economic and institutional capacity...will require years of public investment.” The January 2003 National Security Presidential Directive 24 largely ended the pre-war debate, putting the Department of Defense in charge of managing post-war Iraq.<sup>165</sup>

NSPD 24 created the Office of Reconstruction and Humanitarian Assistance, which would operate under Defense Department auspices, charging it to plan relief and reconstruction programs. Retired Army



President George W. Bush and Secretary of Defense Donald H. Rumsfeld leave a March 25, 2003, meeting at the Pentagon where they discussed the President’s wartime supplemental budget request. (DoD photo)

Lieutenant General Jay M. Garner led ORHA for its short life. When Garner subsequently told Secretary of Defense Rumsfeld that the United States might need to spend “billions of dollars” to rebuild Iraq, the Secretary responded, “if you think we’re going to spend a billion dollars of our money over there, you are sadly mistaken.”<sup>166</sup>

Shortly after Saddam fell, the Iraq Relief and Reconstruction Fund came into play. Its initial \$2.475 billion supported rebuilding in the following areas:<sup>167</sup>

- water/sanitation infrastructure
- feeding and food distribution
- relief efforts for refugees, internally displaced persons, and vulnerable individuals, including assistance for families of innocent Iraqi civilians who suffered losses as a result of military operations
- electricity
- health care
- telecommunications
- economic and financial policy
- education
- transportation
- governance and the rule of law
- humanitarian demining
- agriculture

Lieutenant General Garner never employed these funds. The creation of the Coalition Provisional Authority truncated his tenure in late April 2003. This leadership change marked a major policy shift: “occupy and rebuild” replaced “liberate and leave,” a development not yet fully in focus and certainly not then embraced by Defense. The CPA quickly formulated an ambitious program for the country’s large-scale recovery, relief, and reconstruction. This new plan was substantially larger than any previously anticipated.<sup>168</sup>

On September 17, 2003, less than six months after Saddam was deposed, President Bush asked the Congress for \$20.3 billion for the relief and reconstruction of Iraq, stating that these funds were “essential to secure the transition to self-government and to create conditions for economic growth and investment.”<sup>169</sup> After brief debate, the Congress provided more than 90% of the request,<sup>170</sup> and thus began an

unprecedented nine-year rebuilding campaign, for which congressional appropriations eventually would top \$60 billion.

## You Break It, You Own It?

When Coalition forces entered Iraq, they found the country in much worse condition than pre-war planners anticipated. Indeed, it is not a stretch to say that Iraq was broken before the invasion. But already decrepit conditions severely worsened in April and May 2003, aggravated by looting, insecurity, and a couple of arguably errant decisions by the CPA.

Immediately following the invasion, U.S. Army Corps of Engineers teams quickly assessed Iraq’s civil infrastructure, finding it in grievous disrepair. The Iran-Iraq War and the 1991 Gulf War left pockets of weakness, which the invasion aggravated. United Nations sanctions imposed in the 1990s, effecting as they did an international trade embargo, constrained Iraq’s access to spare parts, limiting the country’s capacity to sustain and maintain its infrastructure. Saddam’s neglect, corruption, and mismanagement exacerbated every shortfall. It soon became clear in mid-2003 that a much larger investment was required.<sup>171</sup>

The widespread looting following the invasion devastated the country’s infrastructure. Looters ransacked government buildings, stole munitions from military depots, robbed and destroyed banks, ravaged oil-sector facilities, ripped apart electrical systems, and incapacitated most of Iraq’s 192 state-owned enterprises. This indiscriminate pillaging caused billions of dollars in damage, provided weapons for insurgents, and destroyed hopes that Iraq’s public institutions and critical infrastructure could quickly resume operations.<sup>172</sup>

What the looters did to Iraq’s government buildings, some argue the CPA did to its government’s bureaucracy. CPA Order 1, issued on May 16, 2003, banned members of Saddam’s Ba’ath Party above certain levels from serving in Iraq’s public sector. Lieutenant General Ricardo Sanchez, Commander of Coalition forces in Iraq from June 2003 to June 2004, later stated that this order “essentially ... eliminated the entire government and civic capacity of the nation. Organizations involving justice, defense, interior, communications,

schools, universities, and hospitals were all either completely shut down or severely crippled because anybody with any experience was now out of a job.”<sup>173</sup>

A growing insurgency followed the looting, fueled in part by CPA Order 2, which, among other things, abolished Iraq’s Ministry of Defense and disbanded the army, putting 500,000 men out of work without pay or pension. As General Petraeus told SIGIR, this action “created tens of thousands, if not hundreds of thousands, of additional enemies of the Coalition.”<sup>174</sup>

In mid-2003, Iraq had no capacity for self-government, no functioning security forces, an almost useless electricity system, virtually no oil exports, and no ongoing revenue stream to pay the costs of rebuilding.<sup>175</sup> Iraq was broken; the United States “owned it.”

## Defining and Redefining: Moving Goals and Benchmarks

Pre-war planning identified areas that would need post-war relief and reconstruction. But reconstruction managers did not define specific goals, objectives, measures, and metrics until very late in the planning process. The relevant documents included:

- **USAID’s *Vision for Post-Conflict Iraq***—This February 2003 paper established a set of milestones, ranging from 60 days to 18 months after the fall of Saddam and reaching many sectors, including health, water and sanitation, electricity, transportation, telecommunications, and agriculture/rural development.<sup>176</sup>
- **ORHA’s *A Unified Mission Plan for Post-Hostilities Iraq***—This April 2003 paper defined the desired “end state” as “a stable Iraq, with its territorial integrity intact, and a broad-based government that renounces WMD development and use and no longer supports terrorism or threatens its neighbors.” It set forth benchmarks that defined the desired end state.<sup>177</sup>
- **CPA’s *Achieving the Vision***—This July 2003 plan defined the desired end state as “a unified and stable, democratic Iraq that provides effective and representative government for the Iraqi people, is underpinned by new and protected freedoms and a growing market economy; is able to defend itself but no longer

poses a threat to its neighbors or international security.” The CPA’s program focused on these four general areas:<sup>178</sup>

- **Security**—establishing a secure and safe environment
- **Essential services**—restoring basic services to an acceptable standard
- **Economy**—creating the conditions for economic growth
- **Governance**—enabling the transition to transparent and inclusive democratic governance

## Obligations and Expenditures: An Incomplete Story

The November 2003 law appropriating \$18.4 billion for the IRRF established the requirement that agencies report quarterly to the Congress on their use of U.S. funds on a “project-by-project” basis.<sup>179</sup> The departments involved in reconstruction attempted to meet this requirement; but, as of the end of 2012, no reliably complete source of information existed showing what U.S. reconstruction funds accomplished. SIGIR issued numerous reports documenting the limitations of the applicable data systems, but little improvement occurred. Thus, the full story on the use of billions of U.S. dollars for reconstructing Iraq will forever remain incomplete.

For the past nine years, SIGIR provided comprehensive reports to the Congress every quarter. In so doing, SIGIR gathered a mountain of data on the use of reconstruction funds. This chapter draws from SIGIR’s 35 *Quarterly and Semiannual Reports* and our independent audit analyses of agency reconstruction data, classifying U.S.-funded programs into four categories that correspond to the CPA’s four core areas. Because of the questionable quality, accuracy, and completeness of the project records, SIGIR often had to make a judgment call when assigning costs to programs and projects. Moreover, their effects are based largely on what the agencies reported to SIGIR.

Table 5.1 shows how much the United States obligated and expended from the five major U.S. reconstruction funds in each of these areas through September 2012.

SIGIR Audit 13-006

## Accounting for Project Costs: Caveat Lector

The Congress mandated U.S. agencies to submit quarterly reports detailing how they used reconstruction funds on a project-by-project basis. It also required that SIGIR's quarterly reports include "a project-by-project and program-by-program accounting of the costs incurred to date for the reconstruction of Iraq."

Using data reported by the State and Defense Departments, USAID, and other agencies, SIGIR has consistently accounted for obligations and expenditures at the program level.

But pinning down the costs of specific projects has been more difficult. Among the problems are these:

- **No commonly understood and applied definition of "project"**—A single record in a database might represent the entire turnkey cost of completing a facility, the cost of building just one component or phase of the facility, the cost of work that was unsatisfactory and had to be redone by another contractor, or the cost of similar work performed at multiple facilities.
- **Inaccurate and incomplete cost data**—SIGIR identified numerous cases in which the costs reported for individual projects did not match across databases and internal agency records. In the case of the Iraq Reconstruction Management System (the \$50 million system developed to support the project-by-project reporting requirement), the recorded costs are the estimated contract values, not the actual expenditures. In another database, SIGIR found multiple instances where the total amount expended for a contract was reported

as the amount expended for each individual project funded by that contract, resulting in a dramatic overreporting of project costs.

- **Missing data**—15% of the IRRF obligations were not accounted for in agency databases. SIGIR could not determine if the missing obligation and expenditure data resulted from data-entry problems or something more, such as fraud. Resolving this issue would entail a close review of every IRRF-funded contract, a task that exceeded SIGIR's resources.

Because of these deficiencies in record keeping, the disposition of billions of dollars for projects remains unknown because the U.S. government agencies involved in the relief and reconstruction effort did not maintain project information in any uniform or comprehensive manner.



*The Falluja Waste Water Treatment System project, on which the United States spent \$100 million in U.S. funds, is not listed as a single project in the Iraq Reconstruction Management System. Instead, IRMS has 49 separate records, including records for project activities funded from the IRRF, CERP, and ESF. (U.S. Army photo)*

TABLE 5.1

### Obligations and Expenditures of Major U.S. Reconstruction Funds, by Area of Use, as of 9/30/2012

\$ Billions

Area	Sector	Obligated	Expended
Security and Rule of Law	Ministry of Defense Support	14.41	13.90
	Ministry of Interior Support	9.73	9.35
	Related Activities	1.12	1.08
	Justice	0.77	0.68
	Infrastructure Security	0.67	0.63
	Corrections	0.53	0.46
	Anticorruption	0.07	0.06
	<b>Subtotal</b>	<b>27.30</b>	<b>26.16</b>
Infrastructure	Electricity	5.45	5.36
	Water and Sanitation	2.78	2.71
	Oil and Gas	1.76	1.76
	Transportation and Communications	1.31	1.25
	General Infrastructure	0.58	0.58
	<b>Subtotal</b>	<b>11.88</b>	<b>11.66</b>
Governance	Public Services	3.06	2.55
	Capacity Development	2.45	2.27
	Democracy and Civil Society	1.91	1.82
	Humanitarian Relief	0.89	0.84
	<b>Subtotal</b>	<b>8.32</b>	<b>7.48</b>
Economy	Private Sector Development	0.98	0.87
	Economic Governance	0.84	0.78
	<b>Subtotal</b>	<b>1.82</b>	<b>1.65</b>
<b>Total</b>		<b>49.32</b>	<b>46.96</b>



## Infrastructure

Three wars, international sanctions, massive looting, and Saddam's reckless neglect devastated Iraq's capacity to provide essential services.<sup>180</sup> A senior official told SIGIR that the "invasion seemed to have occurred just as the condition of the entire infrastructure teetered on the edge of the cliff of disaster."<sup>181</sup>

The CPA made the delivery of basic services a major priority, setting these goals:<sup>182</sup>

- reconstituting the power infrastructure
- improving water-resource management
- ensuring food security
- improving health care—quality and access
- rehabilitating key transport infrastructure
- improving education and housing—quality and access
- reconstructing the telecommunications system

The early phase of reconstruction spending emphasized large capital projects.<sup>183</sup> Almost \$1.64 billion (66%) of the IRRF 1 appropriation was spent on large projects: \$1.1 billion executed by USAID and \$518 million by Defense.<sup>184</sup>

FIGURE 5.3  
Average Slippage in Completion of USACE Infrastructure Projects Valued at More than \$1 Million, by Year of Award, 2004–2011

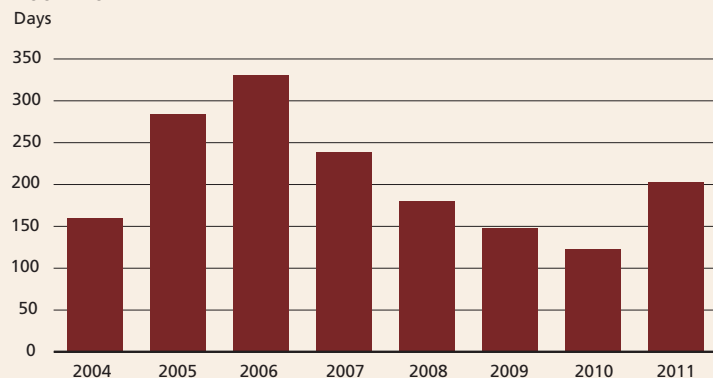
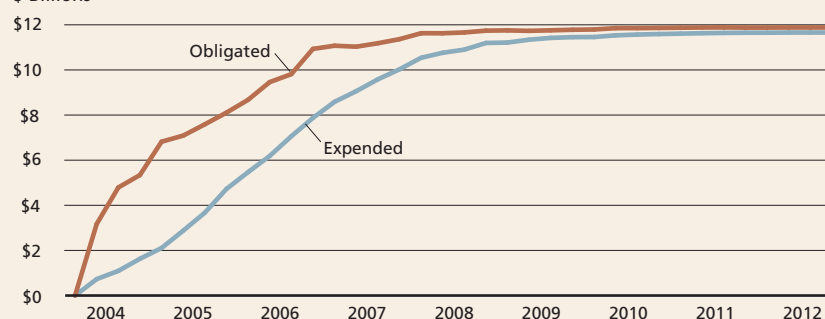


FIGURE 5.1  
Infrastructure: Cumulative Obligations and Expenditures, FY 2004–FY 2012  
\$ Billions



*90% of the money for infrastructure projects was obligated before the end of 2006.*

Over the next nine years, the amount allocated to programs to repair and develop Iraq's critical infrastructure sectors grew to \$12.32 billion. As of September 2012, the United States had obligated \$11.88 billion and spent \$11.66 billion. Almost 70% of this money was obligated within the first two years of the reconstruction effort, and more than 85% of the total obligations came from the IRRF (see Figures 5.1 and 5.2).<sup>185</sup>

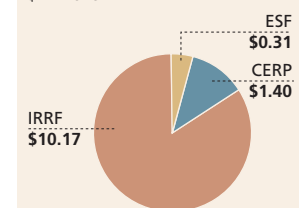
Escalating violence in Iraq severely affected the rebuilding program. Attacks on contractors caused high rates of worker absenteeism, disrupted logistics, delayed countless projects, escalated security and project costs, and forced projects to shut down (see Figure 5.3).<sup>186</sup>

Project management personnel commonly could not visit work sites because of dangerous conditions, diminishing oversight and causing poor results. The U.S. government awarded contracts and task orders containing unrealistic cost estimates and impossible-to-meet completion dates, leading to a parade of change orders that scaled down projects, foreshortened outcomes, and contributed to a trove of complaints that SIGIR heard from Iraqis about the transfer of semi-complete projects.<sup>187</sup>

## Electricity

During the 1980s, average electricity production from Iraq's power plants increased from about 1,200 megawatts to 3,100 MW, generally

FIGURE 5.2  
Infrastructure: Cumulative Obligations, by Fund, as of 9/30/2012  
\$ Billions





Primarily because of looting and sabotage, almost 1,000 electrical towers were destroyed and control systems were damaged, causing Baghdad and beyond to experience frequent blackouts in mid-2003. (Bechtel photo)

keeping pace with rising demand. During the 1991 Gulf War, air attacks severely damaged Iraq's electricity infrastructure, causing production to drop below 2,200 MW.<sup>188</sup>

Supplies could not to meet the country's demand during the 1990s. Although repairs to the system boosted average production to more than 3,600 MW by 2002, the 2003 invasion, postwar looting, and insurgent sabotage quickly drove levels down, hitting a low of 711 MW in mid-April 2003.<sup>189</sup>

Increasing Iraq's electricity production became a paramount priority. CPA and Iraqi officials recognized that rebuilding the power sector was key to reviving Iraq's economy, energizing the infrastructure, improving well-being, and gaining local support for the Coalition's presence.<sup>190</sup>

In July 2003, the CPA established the goals of increasing generating capacity to 4,000 MW by October 2003, to 5,000 MW by January 2004, to 7,000 MW by 2005, and to 14,000 MW by 2009.<sup>191</sup> That same month, the CPA made a more ambitious prediction: electricity supply would be back to prewar levels of 4,400 MW by October 2003.<sup>192</sup>

To reach these goals, USACE deployed Task Force Restore Iraqi Electricity, which used three contractors—Perini Corporation, Fluor International, and Washington Group—for numerous projects to repair electrical infrastructure across the country. Working under its IRRF 1 contract with USAID, Bechtel supported the push, assessing power facilities and making numerous repairs. This collective effort achieved temporary success: on October 6, 2003, Iraq produced more



As part of a \$174 million U.S.-funded project that began in August 2003, a 600-ton, 260 MW combustion turbine is delivered to a substation near Kirkuk in April 2005, after a trip through the Middle East that took more than a year. (USACE photo)

than 4,500 MW of electricity. But the grid was fragile, and it could not hold the increase. Outputs quickly fell, with the promised level of 6,000 MW not sustainably reached until 2009.<sup>193</sup>

In November 2003, the CPA developed a list of 110 high-priority generation, transmission, and distribution projects. To support them, the Congress allocated \$5.56 billion—30% of the entire IRRF 2 funding. Each of the three RIE contracting firms eventually won a \$500 million IRRF 2 contract from Defense to help rebuild Iraq's electricity sector.<sup>194</sup> Separately, USAID awarded Bechtel another contract, valued at \$1.8 billion and funded by the IRRF 2.<sup>195</sup>

In all, the U.S. government obligated more than \$5.45 billion and expended more than \$5.36 billion through September 2012 to increase electricity generation, transmission, and distribution, including the rehabilitation of power plants and transmission lines, the construction of new substations, and the training of Iraqis.<sup>196</sup> Almost 76% of the funding came from the IRRF 2. That share would have been higher but for a \$1.3 billion reduction effected by reprogrammings that moved funds to meet security needs.<sup>197</sup>

The United States completed the last IRRF-funded electricity project in April 2011, involving the construction of a \$29.1 million substation in Ramadi. Seven other electricity projects finished after

TABLE 5.2

**Major U.S.-funded Electricity Projects**

\$ Millions

Project Name	Province	Contractor Name	Contract Award Date	Completion Date		Fund	U.S. Cost
				Original	Actual		
Kirkuk Substation Combustion Turbines	Tameem	Bechtel National, Inc.	2/7/2003	10/31/2005	11/29/2005	IRRF 1	205.2
Baghdad South New Generation Ph II; Equipment	Baghdad	Bechtel National, Inc.	1/5/2004	10/1/2004	8/14/2006	IRRF 2	189.4
Qudas Gas Turbine Expansion	Baghdad	Uruk-Baghdad Joint Venture	8/31/2006	9/13/2007	5/4/2009	IRRF 2	169.5
Baghdad Distribution Substations	Baghdad	Bechtel National, Inc.	3/1/2004	6/15/2005	2/28/2006	IRRF 2	137.2
Buzurgan New Power Generation	Missan	Fluor/AMEC, LLC	3/25/2005	6/1/2006	6/15/2005	IRRF 2	125.1
Khor Az Zubair Power Generation	Basrah	Fluor/AMEC, LLC	9/14/2004	12/29/2005	1/6/2006	IRRF 2	110.9
Power Plant Maintenance Program	Various	Bechtel National, Inc.	3/4/2004	12/31/2004	3/22/2007	IRRF 2	92.7
Doura Power Plant Units 5 and 6	Baghdad	Bechtel National, Inc.	2/7/2003	4/30/2004	6/15/2005	IRRF 1	90.8
Mansuria Natural Gas Development for Power Generation	Various	Bechtel National, Inc.	6/23/2004	7/6/2005	1/31/2006	IRRF 2	62.7

that required \$21.7 million in ESF funds.<sup>198</sup>

The largest electricity sector undertakings rehabilitated and expanded power plants. In 2003, thermal plants provided most of Iraq's electricity. But U.S. investment focused on providing combustion-turbine facilities, which are both more technologically advanced than thermal plants and easier to construct.<sup>199</sup>

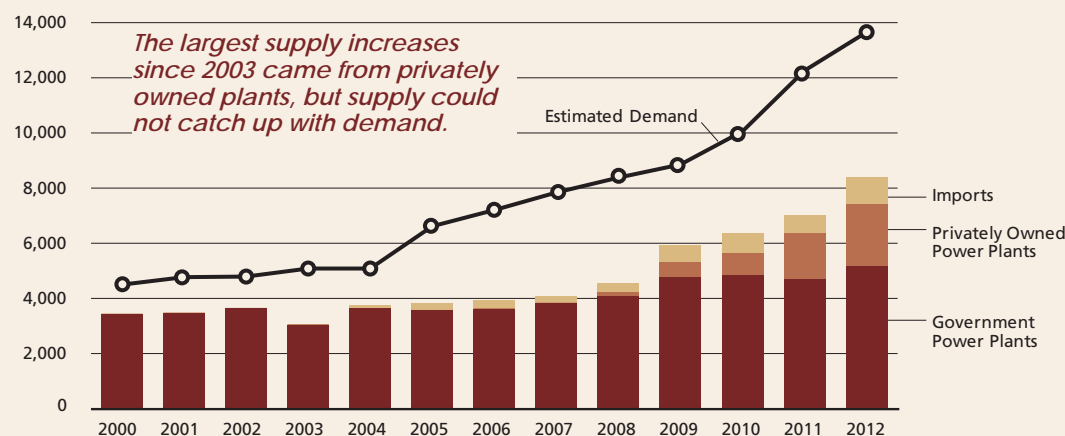
By the beginning of 2008, output from combustion-turbine units accounted for the largest share of the power supply.<sup>200</sup> Table 5.2 lists some of the largest U.S.-funded electricity projects.

In 2009, after the completion of most U.S.-funded electricity-generation projects, production from Iraq's government-run power plants averaged about 4,780 MW, 30% more than in 2004. Production at these plants grew by an additional 400 MW over the next three years, averaging roughly 5,175 MW during the first nine months of 2012.<sup>201</sup>

Cumulative supply on Iraq's grid in 2012, drawn from all sources, averaged about 8,400 MW, which was 3,225 MW higher than the total output from government power plants (see Figure 5.4).<sup>202</sup> Two-thirds of the increase from 2004 to 2012 came from these other sources:

- **Private power plants in the Kurdistan Region**—The Kurdistan Regional Government turned to independent power producers to build and operate power plants in the Region's three provinces.

FIGURE 5.4  
**Average Electricity Supply on Grid vs. Estimated Demand, 2000–2012**  
Megawatts



These facilities collectively produced 1,950 MW in the late summer of 2012, almost all of which the Region consumed. The GOI's Ministry of Electricity considered making similar arrangements, even soliciting bids from independent power producers, but it



*SIGIR PA-07-101 and PA-07-104*

## Shock and Audit: Inspecting an Electricity Plant

SIGIR assessed two large electricity projects in 2007. The projects planned to restore and expand generating capacity at the Qudas Power Plant in Baghdad. SIGIR inspections produced a number of “good news stories,” and this was one, at least with regard to execution. The two projects were adequately designed and properly completed or progressing satisfactorily.

The Qudas work was an important part of the rebuilding program’s strategic commitment to improve Iraq’s electricity production. It involved the installation or rehabilitation of combustion turbines. These units run best when fueled by natural gas, of which Iraq has enormous reserves.

The country’s gas infrastructure in 2003 was vastly underdeveloped. Thus, there was no choice but to burn crude oil or low-grade fuel oil in the combustion turbines at the Qudas plant. But this reduced the generating units’ capacity, increased downtime, and limited long-term productivity. By late 2011, a solution appeared to be in the offing. The Ministry

of Oil signed an agreement with Royal Dutch Shell to form a joint venture to capture and make productive use of natural gas from Iraq’s southern fields. This opened the door to more efficient power plants, assuming the Ministries of Oil and Electricity could learn to work well together.



*The United States spent more than \$250 million restoring the Qudas Power Plant under several different projects. (USACE photo)*



*The Erbil Gas Power Plant, one of three privately built and operated plants in the Kurdistan Region, first came into service in 2008. (KRG Ministry of Electricity photo)*



*A tangle of consumer-installed electric wires carries power from private generators to households in central Baghdad. (Parsons Brinckerhoff photo)*

subsequently canceled the plan.<sup>203</sup>

- **Powerships in Basrah**—In 2010, the first of two floating “powerships” owned by a Turkish company docked in Basrah. By 2012, they produced an average of about 220 MW. (The two Basrah powerships and the Kurdish private power plants provided about one-fourth of the country’s electricity in 2012).<sup>204</sup>
- **Imports**—In 2004, Iraq imported 136 MW of electricity. By 2012, imports increased to about 1,000 MW (12% of Iraq’s total supply), almost all of which came from Iran.<sup>205</sup>

Although the total supply of electricity more than doubled from 2004 through 2012, estimated demand increased at an even faster pace. The causes for this rocketing rise included a modernizing infrastructure, a post-sanctions flood of energy-consuming products, and the ineffective enforcement of electricity fees.<sup>206</sup>

The gap between supply and demand meant that Iraqis continued to endure power outages. Most households supplemented the public supply with power from “backyard” or neighborhood generators. According to a 2011 survey, the government-run grid provided households about 7.6 hours of electricity per day, with 9 out of 10 relying on off-grid generators to fill the gap. Respondents who used both public and private sources said they had an average of





Demonstrators in Basrah protest electricity and water shortages in June 2010. (AP photo)

14.6 hours of electricity per day. Almost 80% rated electricity service as “bad” or “very bad.”<sup>207</sup> In June 2010, when temperatures exceeded 120 degrees Fahrenheit in southern Iraq, the shortages of electricity and potable water spurred violent protests, forcing the Minister of Electricity’s resignation.<sup>208</sup>

As of September 2012, the GOI’s Ministry of Electricity had 41 power plants under construction. These new plants could increase generating capacity to 22,000 MW by the end of 2015. Assuming no delays, the International Energy Agency estimated that Iraq’s grid-based electricity generation would catch up to peak demand by 2015.<sup>209</sup>

## Water and Sanitation

In the early 1990s, Iraq had a well-developed water and sanitation sector: 95% of the urban population and 75% of the rural had access to potable water. Sewerage and wastewater coverage was high, particularly in urban areas, where 75% of the population had a sewer or septic tank connection. Public-health indicators were good, with minimal water- and sanitation-related diseases.<sup>210</sup>

But by 2003, this sector had experienced a devastating decline. Water distribution lines deteriorated from age, and the corroded system allowed contaminants in, causing a sharp rise in disease rates. The United Nations



Access to modern sewer facilities remains a problem for many Iraqi families.

SIGIR EV-10-002

## Evaluating Water: Contracts in Contrast

The CPA’s two largest water projects—among the very largest in the Iraq program—were the \$277 million Nassiriya Water Treatment Plant in Thi-Qar province in southern Iraq and the \$185 million Ifraz Water Treatment Plant near the Kurdistan Region’s capital city, Erbil.

The Nassiriya plant aimed to serve 550,000 people in five surrounding cities, while the Ifraz would serve 600,000 in Erbil. In 2010, after the two projects were complete and under Iraqi control, SIGIR visited both to evaluate their effects. SIGIR evaluators met with local and

national Iraqi government officials and commissioned a public opinion poll to obtain the local Iraqis’ views.

A remarkable contrast emerged. Both contracts were executed well, but the operations and maintenance of the Nassiriya plant was much worse than at Ifraz. The former plant had begun to suffer breakdowns shortly after its transfer to Iraqi control. But the Kurdish water authorities expanded Ifraz, which was perhaps the most successful of all large infrastructure projects accomplished in Iraq.



*The Nassiriya plant produced water at 61% of capacity (a number that fell to 20% during frequent electricity shortages); 67% of the people serviced by the plant said they were dissatisfied with the service; and 95% were dissatisfied with the water quality.*



*The Ifraz plant functioned at nearly 100% of capacity; 88% of the people serviced by the plant were satisfied with water availability; and 85% were satisfied with the water quality.*

SIGIR PA-07-105

## Danger and Waste at the Mosul Dam

The Mosul Dam, completed in 1984, lies on the Tigris River in northern Iraq. The soils beneath the dam are subject to erosion. Their movement created potentially threatening cavities beneath the dam's structural support. Reports in the Iraqi press said the deficiencies at the dam presented a potential danger.

Since the 1980s, the Iraqi Ministry of Water Resources implemented remediation measures at the dam, including a continuous grouting program to fill sub-surface cavities. In 2005, the U.S. government partnered with the GOI to initiate improvements, executing 21 contracts worth a combined \$27 million to

mitigate the dam's deficiencies.

SIGIR inspectors visited the dam in 2007, finding that the project was poorly designed and inadequately executed. Equally troubling, the team found no dedicated monitor for the project.

The inspection concluded that approximately \$19.4 million worth of equipment and materials for implementing improvements to the grouting operations was not being used. To its credit, the U.S. Mission responded quickly by following up on these problems, adding new investment and oversight to help remedy the issues SIGIR uncovered.



The Mosul Dam supplies drinking water, irrigation, flood control, and hydroelectric power to the surrounding region. (IRMO photo)

Children's Fund estimated that 25% of all children's deaths in Iraq in 2002 were caused by waterborne bacteria.<sup>211</sup>

In light of this grave public health crisis, the CPA requested \$3.71 billion from the Congress to restore and expand Iraq's water and sanitation infrastructure. In November 2003, the Congress exceeded that request, allocating \$4.33 billion in IRRF 2 money for the water sector,<sup>212</sup>

making it the second-highest infrastructure priority behind electricity.<sup>213</sup>

The CPA's strategic plan outlined these water and sanitation sector goals:<sup>214</sup>

- Increase potable water access to 90% of Iraqis.
- Increase sewerage access to 15% of Iraqis.
- Reduce water distribution network losses from 60% to 40%.

The Department of State later determined these goals to be unrealistic because there was no baseline data on Iraq's water and sanitation infrastructure. Moreover, the country lacked a metering system to measure results.<sup>215</sup> State changed its water-sector metrics from the percentage of Iraqis with access to water and sanitation to the estimated number of Iraqi people who would benefit from water and sanitation projects. The new end-state goal was to provide an additional 8.4 million people with access to potable water and an additional 5.3 million with access to sewerage services.<sup>216</sup>

The water sector's plans suffered a severe setback because of funding reductions implemented in the 2004–2005 reprogrammings. By mid-2005, the IRRF 2 allocation to the sector was half the original number (\$2.15 billion, down from \$4.33 billion).<sup>217</sup> The U.S. government now planned to use \$1.5 billion to fund projects to increase potable water access, while using the remainder to build sewerage systems, improve irrigation, and repair the 149-mile Sweetwater Canal.<sup>218</sup>

Between February 2003 and September 2012, the U.S. government obligated \$2.78 billion and expended \$2.71 billion to rehabilitate and improve Iraq's water and sanitation sector. More than 60% of the obligations supported projects to produce and distribute potable water.<sup>219</sup> The IRRF funded three-quarters of the projects. The emphasis on large infrastructure at the beginning of the program resulted in the obligation of 90% of the funding by September 2006.<sup>220</sup>

Water projects included some of the costliest U.S.-funded reconstruction efforts in the entire program, including the Nassiriya and Iqra' Water Treatment Plants and the Falluja Waste Water Treatment System, with a combined U.S. cost of \$545 million.<sup>221</sup> See Table 5.3 for a list of major U.S.-funded water and sanitation projects.

TABLE 5.3  
**Major U.S.-funded Water and Sanitation Projects**  
 \$ Millions

Project Name	Province	Contractor Name	Contract Award Date	Completion Date		Fund	U.S. Cost
				Original	Actual		
Nassiriya Water Supply	Thi-Qar	Fluor/AMEC, LLC	4/21/2004	12/13/2007	9/11/2007	IRRF 2	259.9
Erbil - Ifraz Water Project	Erbil	Fluor/AMEC, LLC	4/21/2004	10/1/2005	7/20/2006	IRRF 2	185.3
Falluja Waste Water Treatment Plant	Anbar	Fluor/AMEC, LLC; Various	6/26/2004	1/1/2006	5/2/2011	IRRF 2, ESF, CERP	99.8
Nassiriya Drainage Pump Station	Thi-Qar	Washington International Black & Veatch	11/14/2004	12/31/2006	2/28/2007	IRRF 2	73.9
Sadr City R3 Water Treatment Plant	Baghdad	Bechtel, Washington International, Inc./ Black & Veatch	1/5/2004	10/31/2005	12/31/2008	IRRF 2	65.8
Rural Water Supply Project Implementation	Multiple	Bechtel National, Inc.	6/13/2004	11/1/2005	9/15/2006	IRRF 2	62.0
Basrah Sewer Project	Basrah	Fluor/AMEC, LLC	6/15/2004	4/7/2006	10/30/2006	IRRF 2	50.5
Balad Roaz Water Treatment Plant	Diyala	Fluor/AMEC, LLC	4/30/2004	10/1/2005	5/31/2006	IRRF 2	40.0
Eastern Euphrates Drain	Muthanna	Ministry of Water Resources	8/29/2006	1/29/2009	12/31/2010	IRRF 2	38.4

In March 2010, the State Department reported it had achieved its 2006 water and sanitation targets, saying that U.S.-funded water projects generated almost a quarter of the potable water produced in Iraq each day, servicing 8.7 million people; U.S.-funded sanitation projects processed 1.2 million cubic meters of wastewater per day, servicing 5.3 million people.<sup>222</sup> But State pointed out that the lack of water metering in Iraq made it difficult to assess how much water was reaching the intended users.<sup>223</sup>

After the United States turned over the large water projects to Iraqi control, reconstruction officials discovered that, in many cases, the Iraqis were not operating these projects properly. Shortfalls included equipment theft, badly trained staff, poor operations and maintenance practices, and inadequate supplies of electricity and treatment chemicals.<sup>224</sup>

In response, the U.S. government set aside \$116 million in ESF

funding in 2006 to create a program to “assist the Iraqi people in the proper operation and maintenance of 40-plus selected U.S.-government-supported water and wastewater facilities.” This Water Sector Supply Program provided facility assessments, technical assistance, spare parts, and repair services.<sup>225</sup>

In March 2011, the United Nations reported that, while Iraq had the second-highest amount of available water per capita in the Middle East, its water quality was poor, violating Iraq National Standards and World Health Organization guidelines.<sup>226</sup> In a separate survey conducted that same year, about two-thirds of the households said they relied on the public water supply as their main source for drinking water, with a quarter of them noting that they had access to potable water less than two hours per day and just 38% rating drinking water as “good” or “very good.”<sup>227</sup>



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Falluja Waste Water Treatment System:  
A Case Study in Wartime Contracting

U.S.-completed Components:

U.S.-funded Expandable  
“Backbone” System to be  
completed at a cost of  
\$108 million\*

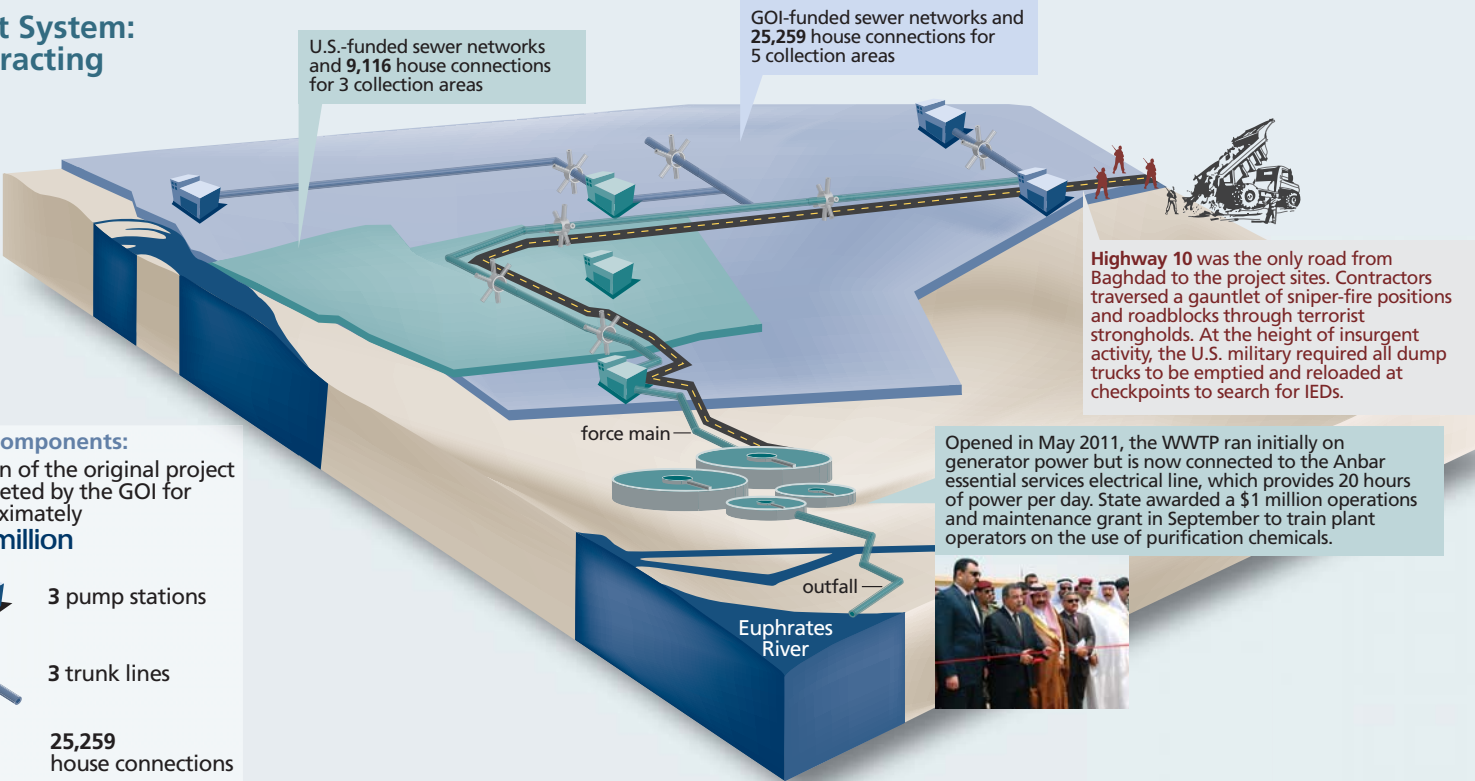
- Wastewater Treatment Plant (WWTP)
- 3 pump stations
- 4 trunk lines
- 9,116 house connections

\*Includes \$8.0 million in DFI funding.

GOI Components:

Portion of the original project  
completed by the GOI for  
approximately  
\$87 million

- 3 pump stations
- 3 trunk lines
- 25,259 house connections



	2004	2011		2014	
	Initial Estimate	Snapshot	% Change from 2004	Estimated Completion	% Change from 2004
Cost	\$35 M	\$108 M	↑ 209%	\$195 M	↑ 457%
Months to Completion	18	88	↑ 389%	114	↑ 533%
Residents Served	100,000 (estimated)	38,400 (58,300 target)	↓ 62%	220,000 (estimated)	↑ 120%
Contracts/Grants	1	42	↑ 4,200%	42+ GOI	> 4,200%



Before:  
Sewage in the streets in 2004



After:  
Completed WWTP in 2011

The Falluja Waste Water Treatment System was meant to rid Falluja’s city streets of raw sewage, alleviate contamination of potable water sources, and reduce instances of illness and death linked to poor sanitation. The project was undertaken in 2006 when the city was wracked with violence. Limited planning, a minimal understanding of site conditions, an unskilled workforce, and no clear idea about how much the system would cost burdened the project. Violence became so prevalent that trenches and pipes laid by U.S. contractors were regularly blown up. Several times, the U.S. military had to stop construction until security conditions improved.

- Other adversities included:
- On-site progress assessments could not be performed.
  - The original task order required Fluor/AMEC to complete the system in 18 months, but because of security delays, construction did not begin until early 2005.
  - The shift of \$2.2 billion out of the water sector occurred just as more money was needed for the project.
  - The choice of a more complicated plant design and the lack of reliable power from the grid caused delays and increased costs.
  - The mid-2005 shift from large design-build contracts to smaller contracts carried out by Iraqi contractors caused delays.



## Oil and Gas

Iraq has the world's third-largest proven reserves of crude oil, estimated in 2010 at just over 143 billion barrels.<sup>228</sup> Recent discoveries indicate that the number may be much higher. Iraq's ability to extract these reserves varied significantly over time (see Figure 5.5).

After peaking at 3.5 million barrels per day in 1979, the country's crude oil production plummeted to 1.0 MBPD in 1981, rebounded to 2.9 MBPD in 1989, but then hit a low of 0.3 MBPD in 1991 following the 1991 Gulf War. Lingering damage from that conflict along with international sanctions kept oil production low through 1996. Output recovered thereafter, though erratically. During the two-month period before the March 2003 invasion, oil production jumped to just over 2.5 MBPD.<sup>229</sup>

Iraq's extraordinary petroleum riches led to the pre-war presumption that revenues from their sale would finance the country's reconstruction. To ensure this, U.S. planners deemed a rapid post-invasion restoration of the oil sector as critical to achieving the Coalition's strategic goals.<sup>230</sup>

In February 2003, the Department of the Army developed a program to restore Iraq's oil infrastructure so that it could reach pre-war production and export levels: 2.5 MBPD and 2.1 MBPD, respectively.<sup>231</sup> On March 8, 2003, USACE awarded Kellogg Brown

*SIGIR SA-05-001*

### Al-Fatah Pipe Dream

During the 2003 invasion, Coalition forces bombed al-Fatah Bridge in north-central Iraq, severing the 15 oil and gas pipelines it carried across the Tigris River. This damage cut off oil flows to the Baiji refinery, Iraq's largest. Repairing the pipelines was crucial to the recovery of Iraq's oil sector.

Originally estimated at \$5 million, the al-Fatah project planned to repair the bridge and the pipelines. But the CPA and the Ministry of Oil decided instead to use horizontal directional drilling to re-route the pipelines under the river, which increased the estimated project costs to \$28 million.

An initial study of the geological conditions beneath the river produced a recommendation against drilling because of the sandy soil. But horizontal drilling work pressed ahead anyway, with tens of millions of dollars wasted on churning sand, as attempt after attempt to drill failed to make headway. The \$75.7 million in DFI funds allocated to the project was spent accomplishing just 28% of the project's scope. Ultimately, the drilling plan was

abandoned, with the bridge and its pipelines repaired under a new \$29.7 million IRRF-funded contract that the U.S. government awarded to Parsons Iraq Joint Venture. Because of the nature of the original contract, the government was unable to recover any of the money wasted on this project.



*Coalition bombing damaged al-Fatah Bridge in 2003.*

FIGURE 5.5  
**Crude Oil Production, 1970–2012**  
Million Barrels per Day

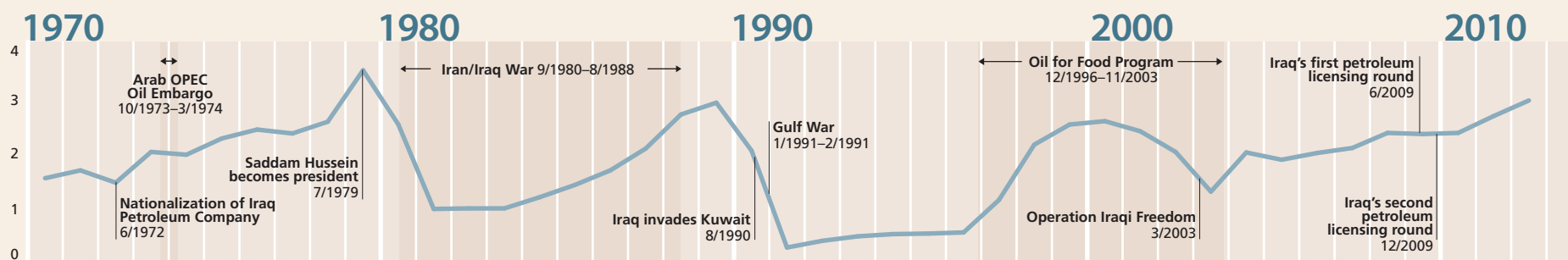
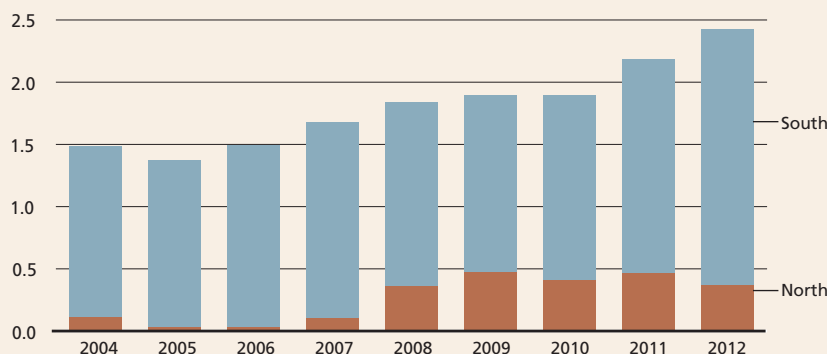


FIGURE 5.6  
Crude Oil Exports, North vs. South, 2004–2012  
MBPD

*Since 2004, most crude oil exports came from the large southern fields.*



& Root a non-competitive contract with a \$7 billion ceiling to restore and operate Iraq's oil infrastructure. It was the largest reconstruction contract for Iraq's rebuilding and the largest known sole-source contract in U.S. history.<sup>232</sup>

After the invasion, USACE surveyed Iraq's oil infrastructure, estimating that combat operations and the looting that followed caused \$1.4 billion in damage: \$457 million from military action and \$943 million from post-war depredations. Moreover, years of neglect during the Saddam era had left major pieces of the infrastructure in need of urgent maintenance. Repairing the oil system to a level that could support the CPA's production and export goals would require at least \$1.7 billion.<sup>233</sup>

In July 2003, the Iraqi Ministry of Oil and the CPA initiated a plan that anticipated executing 226 projects costing \$1.14 billion. Task Force Restore Iraqi Oil worked to restore the damaged oil infrastructure and revive Iraq's oil production and export capacity.<sup>234</sup>

The task force's efforts helped the CPA meet initial production goals by September 2003. But by mid-2004, production and export levels dropped to below pre-war levels, due to a combination of focused insurgent attacks on oil pipelines, failing infrastructure, and a general deterioration of the security situation. Between December 2004 and May 2005, production flat-lined at about 2.1 MBPD, with exports hovering between 1.4 MBPD and 1.6 MBPD. These declines



A drilling rig operates in al-Rumaila oil field west of Basrah in 2010. (BP photo)

occurred notwithstanding that through June 2005 the U.S. government had obligated nearly \$1.2 billion to restore and sustain Iraq's crude oil production and export levels.<sup>235</sup>

Between 2003 and 2007, more than 400 attacks hit Iraq's pipelines, refineries, and workers. Corruption troubled the oil sector as well, including the smuggling or diversion of refined products, which contributed to decreased exports.<sup>236</sup> In early 2007, Iraq suffered a post-2003 production low, but levels began to rise later that year, as the Coalition strategy to repress attacks on oil facilities took effect. By July 2007, output stood at 2.1 MBPD. Exports resumed growth too, reaching 1.98 MBPD by November 2007.<sup>237</sup>

The Infrastructure Security Program's Pipeline Exclusion Zone, a project designed to secure pipeline corridors, helped reduce attacks. It protected the crucial pipelines linking Iraq's northern oil fields to the Turkish port at Ceyhan.<sup>238</sup>

The U.S. government obligated and expended \$1.76 billion for projects to restore, build, and protect facilities in Iraq's oil and gas sector and to provide technical training for Ministry of Oil employees. All of the U.S. funding came from the IRRF, with the majority of obligations occurring during the first two years of the reconstruction program.<sup>239</sup> See Table 5.4 for a list of major U.S.-funded projects.

By late 2012, Iraq's oil exports topped 2.62 MBPD, a rise of nearly 45% from early 2009, and averaged about 2.42 MBPD for the year

TABLE 5.4  
**Major U.S.-funded Oil and Gas Projects**  
 \$ Millions

Project Name	Province	Contractor Name	Contract Award Date	Completion Date			U.S. Cost
				Original	Actual	Fund	
Restore Natural Gas Liquid and Liquefied Petroleum Gas Plants	Basrah	Kellogg Brown and Root	5/2/2004	12/31/2005	5/29/2007	IRRF 1	146.7
Well Logging	Basrah	Parsons Iraq Joint Venture	10/27/2005	6/1/2006	9/25/2006	IRRF 2	88.1
Restore Gas and Oil Separation Plants	Basrah	Kellogg Brown and Root	5/2/2004	4/1/2006	12/31/2006	IRRF 1	84.5
Project West Qurna 8	Basrah	Kellogg Brown and Root	5/2/2004	NA	NA	IRRF 1	82.3
Al Fatah and Kirkuk Pipeline Crossings	Tameem	Parsons Iraq Joint Venture	11/19/2004	NA	4/1/2006	IRRF 2	65.7
Al-Basrah Oil Terminal	Basrah	Parsons Iraq Joint Venture	3/11/2005	12/31/2006	7/27/2007	IRRF 2	64.0
Qarmat Ali Pressure Maintenance and Pipeline Replacement	Basrah	Parsons Iraq Joint Venture	4/7/2005	1/1/2006	NA	IRRF 2	31.2

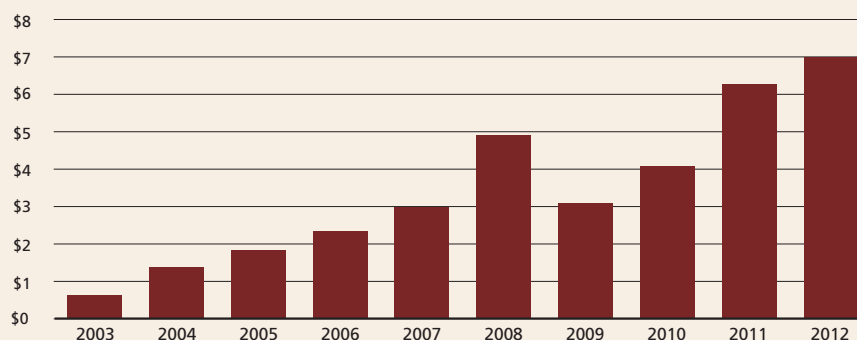


Single-point mooring station off al-Faw. (Leighton Offshore photo)

(see Figure 5.6).<sup>240</sup> The rise in exports, coupled with oil price increases, generated large increases in Iraq's national income, with oil receipts more than doubling from 2009 to 2012 (see Figure 5.7).<sup>241</sup>

In 2009, the Ministry of Oil launched the first of four bidding rounds for rights to develop the country's petroleum reserves, which the ministry had revised upward from 115 billion to 143 billion barrels in late 2010. By the completion of the fourth round in mid-2012, the GOI had entered into contracts with international oil companies for the development of 17 fields: 13 for crude oil development and 4 for natural gas.<sup>242</sup>

FIGURE 5.7  
**Oil Receipts, Monthly Average by Year, 2003–2012**  
 \$ Billions



*Oil receipts have grown steadily since 2009.*

Despite gains in production and exports, an array of problems still burdened Iraq's oil and gas sector. For example, pipeline bottlenecks limited export volume, and the new single-point mooring systems supporting off-shore exports sometimes operated at just 50% of capacity. At the end of 2012, Iraq needed more pipelines and storage facilities to realize its vast potential.<sup>243</sup>

Tensions between the GOI in Baghdad and leaders of the Kurdistan Regional Government also limited oil exports, with KRG leaders reducing the flow of the Region's oil into the northern pipeline to Ceyhan in 2012 because of disputes over reimbursement payments

from Baghdad. These tensions dimmed prospects for parliamentary agreement on the long-delayed hydrocarbon laws necessary to improve governance over the oil and gas sector. The absence of this legislation leaves elementary issues unresolved, such as which government entities have the right to export Iraqi oil.<sup>244</sup>

## Transportation and Communications

During the 1970s and 1980s, the Iraqi government invested heavily in the country's transportation infrastructure. Iraq had two international and three domestic airports, six cargo ports, more than 40,000 kilometers of roads, and almost 2,500 kilometers of rail lines. The 1991 Gulf War damaged much of this infrastructure. Saddam's neglect, international sanctions, the 2003 invasion, and post-war looting further devastated the system.<sup>245</sup>

United Nations sanctions prevented Iraqi Airways from resuming commercial airline service between 1991 and 2000. Iraq had only minimal aviation capacity up to 2003. When the Coalition invaded, no Iraqi airport could support commercial air operations because the country lacked avionics support systems.<sup>246</sup> Iraq's ports also suffered. Submerged wreckage and poor dredging made the import and export

of goods by sea very challenging.<sup>247</sup>

The country's communications systems were equally debilitated after 1990. By 2003, Iraq had just 833,000 landline connections and 80,000 mobile phone subscribers, supporting a population of 27 million. The invasion aggravated matters, destroying 12 of Baghdad's 38 telephone exchanges along with all of Iraq's international switching and satellite-earth stations. Post-war looting inflicted further damage, causing telephone access to become virtually nonexistent.<sup>248</sup>

The United Nations and the World Bank estimated in 2003 that the transportation and communications sector required \$3.38 billion of investment.<sup>249</sup> The CPA planned to rehabilitate and restore strategic transportation and telecommunications sectors to pre-war levels and introduce advanced technologies. Specifically, it called for re-opening Iraqi airspace and airports, repairing the broken telephone networks, and developing new mobile phone services.<sup>250</sup>

As of September 2012, the U.S. government had obligated \$1.31 billion and expended \$1.25 billion on projects to repair and improve Iraq's transportation and communication capabilities. Almost 70% of the funds came from the two IRRF appropriations. More than one-half of the obligations occurred by July 2005 and more than 90% by September 2007. No new obligations occurred after

TABLE 5.5  
Major U.S.-funded Transportation and Communications Projects  
\$ Millions

Project Name	Province	Contractor Name	Contract Award Date	Completion Date		Fund	U.S. Cost
				Original	Actual		
Advanced First Responder Network	Multiple	Lucent Technologies, Inc.	9/26/2004	6/30/2005	1/15/2006	IRRF 1 & 2, ISFF	198.0
Digital Microwave Radio Communications Network	Multiple	Volpe Center, Mafeks International, LLC	2/20/2006	9/2009	9/2011	IRRF 2, ESF	48.0
Consolidated Fiber Network	Multiple	Bechtel National, Inc.	1/5/2004	3/31/2006	6/30/2006	IRRF 2	47.0
Al-Mamoon Exchange and Communications Center	Baghdad	Alfa Consult, The Kufan Group	7/31/2005	2/13/2007	6/30/2011	IRRF 2	32.4
Telecom Subscriber Service	Multiple	Bechtel National, Inc.	2/7/2003	3/13/2004	3/13/2004	IRRF 1	32.3
Airport Administration	Multiple	Skylink Air and Logistical Support	3/21/2003	1/31/2005	1/31/2005	IRRF 2	27.2
Communications Based Train Control System	Multiple	Volpe Center, Mafeks International, LLC	3/31/2005	9/30/2010	3/2011	IRRF 2	17.3
Umm Qasr Dredging Phase 2	Basrah	Bechtel National, Inc.	2/7/2003	10/31/2005	10/22/2003	IRRF 1	15.9
New Radar for Basrah International Airport	Basrah	CDM/CAPE	9/27/2006	11/30/2008	2/1/2009	IRRF 2	15.0





Approximately \$350 million in CERP funds were spent on transportation projects, mostly for road construction.

July 2011.<sup>251</sup> Table 5.5 lists major projects in the transportation and telecommunications sector.

### Transportation

More than \$853 million (65%) of the major U.S. reconstruction funds obligated in this sector supported transportation projects to rehabilitate and improve Iraq's railways, roads, airports, and ports. The five largest transportation projects, all funded with the IRRF and costing \$94 million, improved Iraq's airport operations and railway

SIGIR PA-06-057

### Baghdad Railway Station: A Train Station on Time

The Baghdad Railway Station, the center for all rail service in Iraq, contains the offices for the Ministry of Transportation and the Iraq Republic Railway. Iraq monitors, controls, and coordinates all national train movements from this station.

According to a 2004 estimate by the Iraq Reconstruction Management Office, Iraq's economy was losing \$17.5 million per week because of the country's inability to transport goods by rail. The U.S. government spent \$6 million to renovate the Baghdad Railway Station. The project worked.

A SIGIR Inspection team visited the station in May 2006, concluding that the project's results were consistent with the contract's objectives. The Iraq Republic Railway now had work spaces that offered a much safer and healthier environment for its employees and visitors, and

the station's structures and utility systems had been modernized to sufficiently support the railway's services and operations.



The United States spent \$6 million modernizing the Baghdad Railway Station. (USACE photo)

communications, and reopened the Port of Umm Qasr.<sup>252</sup> The U.S. government used CERP funding for thousands of transportation-related projects, including several multimillion-dollar undertakings, such as the \$5.4 million effort to provide solar street lighting for the city of Falluja and \$4.2 million project to construct the Baghdad International Airport Caravan Hotel.<sup>253</sup>

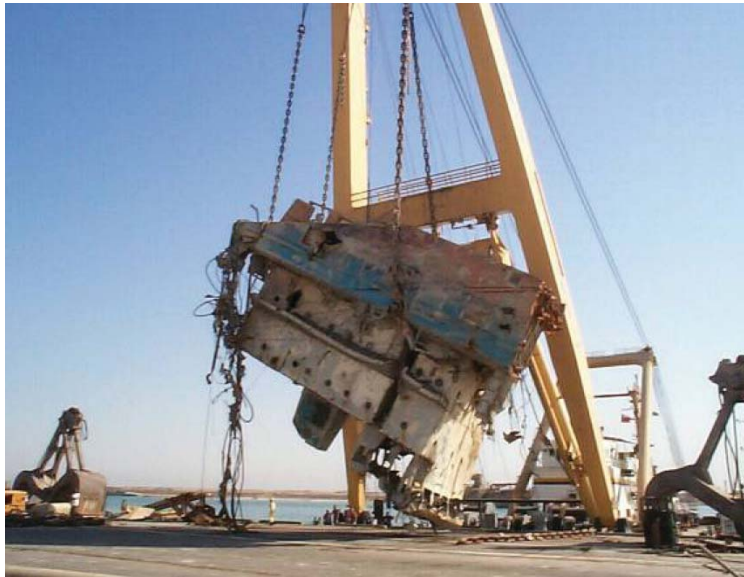
### Civil Aviation

In August 2003, Iraq's airspace re-opened. But, by October 2003, Iraq's two international airports were only handling Coalition and non-commercial charter flights. Early U.S. government-funded aviation projects focused on rehabilitating runways and terminals, providing power generation, and improving avionics and radars. In August 2004, Iraqi Airways flights between Amman, Jordan, and Baghdad began.<sup>254</sup>

By January 2012, all of Iraq's civil aviation assets, including six airports and six aviation towers previously operated by the U.S. government, were under GOI control.<sup>255</sup> More than 20 airlines



A retired Federal Aviation Administration controller contracted by the ICAA advises an Iraqi air traffic controller at Baghdad International Airport. (U.S. Air Force photo)



*In one of the earliest IRRF-funded projects, a crew removes ship remains from the Port of Umm Qasr in 2004. (Bechtel photo)*

provided service to Iraq throughout 2012. Of note, in April of that year, the Iraq Civil Aviation Authority announced the resumption of commercial air service between Iraq and Kuwait for the first time since 1990.<sup>256</sup>

### Railroads

The U.S. government spent about \$200 million to provide railroad equipment and rehabilitate more than 200 railway stations across Iraq.<sup>257</sup> In 2009, efforts to improve Iraq's railway system resulted in the first successful rail trip from the western Syrian seaport of Tartous to Umm Qasr port via Baghdad.<sup>258</sup>

The most significant work in this sector entailed two major undertakings, the \$17.3 million Communications-Based Train Control and the \$48 million Digital Microwave Radio Communications Network, which together significantly upgraded Iraq's antiquated system of dispatching, controlling, and tracking trains. Both projects were completed in 2011, providing the country with a state-of-the-art train control system allowing dispatchers to manage rail movements across the country via data and voice methods.<sup>259</sup>

### Roads and Bridges

Reconstruction managers obligated nearly 40% of all transportation funding to improve Iraq's systems of roads and bridges. The CERP and the IRRF supported more than 1,500 projects to repair and repave village roads and bridges throughout Iraq. While there were several multimillion-dollar projects, the vast majority of the individual transportation projects were relatively inexpensive (less than \$200,000).<sup>260</sup>

### Ports

The United States obligated more than \$130 million on projects to dredge and upgrade the Port of Umm Qasr, Iraq's only deepwater port. Three of the projects, valued at more than \$43 million, removed more than one million cubic meters of silt and debris from the port, opening Umm Qasr for regular commercial traffic.<sup>261</sup>

### Communications

The United States obligated more than \$350 million on projects to rehabilitate and upgrade Iraq's communications networks.<sup>262</sup> The three largest projects consumed the majority of this funding.

- The **Advanced First Responder Network** improved public safety by increasing the communications capabilities between the Ministry of Interior's first responders and Iraqi citizens. The project provided infrastructure and equipment, including more than 30,000 first-responder radios. By the time the Iraqis took control of the system in June 2006, the U.S. government had expended \$198 million on it.<sup>263</sup>
- USAID managed the \$47.0 million project to build a **Consolidated Fiber Network**, which improved Iraq's voice transmission network. The project, completed in June 2006, employed 1,000 Iraqis. However, a USAID audit found insufficient documentation to verify that the project met the end-user and employment goals.<sup>264</sup>
- The \$32.4 million **al-Mamoon Exchange and Communications Center** was designed to serve as the telecommunications hub for the Ministry of Communications. The seven-story office building included state-of-the-art equipment to improve radio transmissions,





The \$18.3 million al-Mamoon Exchange and Communications Center in Baghdad was turned over to the GOI on June 30, 2011, almost five years after its originally forecasted completion date. (USACE photo)

cellular and landline telephone communications, and high-speed Internet service in Baghdad. Originally awarded in 2006, this project encountered contracting problems and sabotage during construction, delaying its completion until June 2011 and increasing its originally planned cost by more than 60%.<sup>265</sup>

Of the more than 300 CERP-funded communications projects, the five most expensive collectively cost \$6.9 million. These projects rehabilitated Baghdad International Airport's communications building, constructed radio towers, and provided satellite service for mobile phones.<sup>266</sup>

By November 2004, the number of landline customers served in Iraq exceeded the pre-war level of 833,000, and, by the following month, the number of mobile phone subscribers surpassed landline customers.<sup>267</sup> As of mid-2005, nearly 1 million new landlines had been installed and more than 2.4 million new mobile telephone subscriptions initiated.<sup>268</sup> By mid-2011, Iraq's mobile phone users topped 23 million (see Figure 5.8).<sup>269</sup> Despite these improvements, Iraq's telecommunications sector remained one of the least developed in the Middle East.<sup>270</sup>

#### SIGIR Audit 07-002

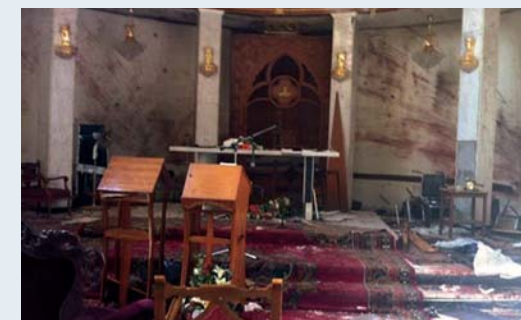
### Responding to First Responders: Emergency Action Leads to Success

In March 2004, USACE awarded a contract for an Advanced First Responder Network. By the time this \$214 million project was completed, in May 2006, the government had spent \$192 million in U.S. funds.

SIGIR audited the AFRN project in July 2006, identifying significant deficiencies: the project failed to produce a reliable nationwide first-responder communication system, and the network's command and control system did not provide an effective means for dispatching and directing first responders. A follow-up audit in April 2007 found that the contractor had remedied the deficiencies. The operational effectiveness of the AFRN system had greatly improved, as demonstrated by its increasing use by Iraqi citizens.

There was more wrong with the AFRN project than just poor performance. On September 21, 2012, the Department of Justice announced that, as a result of a whistleblower suit, the contractor had agreed

to pay the United States \$4.2 million to settle False Claims Act allegations alleging that, between January and July 2005, it had submitted misleading testing certifications to the Army in connection with the design, construction, and modernization of the AFRN.

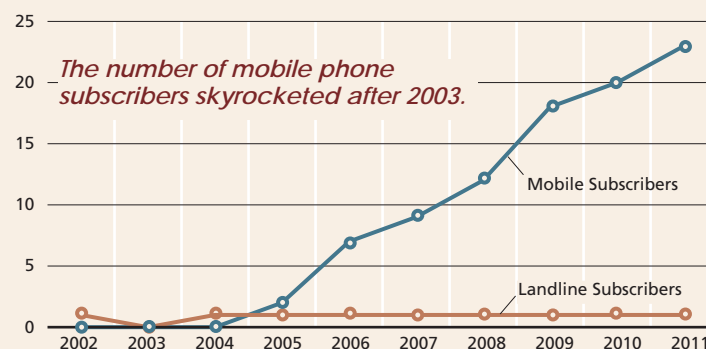


The Advanced First Responder Network improved communications capabilities during emergencies, such as the October 2010 attack on the Syriac Catholic church in Baghdad. (Ankawa photo)

FIGURE 5.8

#### Landline and Mobile Phone Subscribers, 2002–2011

Millions



## Security and Rule of Law

The CPA designated security as a core area of emphasis. It listed the following priorities as necessary for progress:<sup>271</sup>

- developing and training Iraq's security forces
- developing national security and civilian oversight mechanisms
- ensuring border security
- building the justice system and improving the penal system
- ensuring that Iraq is free of weapons of mass destruction

As the security situation worsened in 2003, the United States allocated an initial \$3.24 billion from the IRRF 2 for “security and law enforcement” and an additional \$1.32 billion for justice and related programs.<sup>272</sup> Because of contracting delays, the CPA could not access these IRRF 2 funds until the late spring of 2004, after Iraq's meager security forces had failed in their first major venture into the field.<sup>273</sup>



The United States provided funding and other support to help the Ministries of Finance and Foreign Affairs recover from the devastating bombings of their buildings on August 19, 2009. (ATF photo)

The security challenges associated with post-war rehabilitation went far beyond the wave of looting that immediately followed Saddam's fall. They were seeded by long-standing sectarian and ethnic differences, the democratic ascent of Iraq's majority Shia population, and a Sunni-fomented insurgency. Sunni-Shia divisions erupted into violence after the 2003 invasion, gravely complicating the rebuilding of Iraq's security apparatus and impeding implementation of the rule of law.<sup>274</sup>

Aggravating matters, the Arab-Kurd ethnic divide widened over the course of the program, as the three northern Kurdish provinces formed a semiautonomous regional government, maintained independent security forces, and pursued an expansive agenda regarding claims over hydrocarbon resources and territory. See Figure 5.9 for the boundaries still in dispute between the Government of Iraq and the Kurdistan Regional Government.<sup>275</sup>

Over the first half of 2004, Iraq destabilized by the week, with security incidents averaging 75 per day.<sup>276</sup> When sovereignty transferred to the Interim Iraqi Government in June 2004, Iraq was far from secure. Moreover, just 6% of its police forces had adequate training, and the Army was weak. Rising violence threatened the state.<sup>277</sup> The U.S. government responded by establishing the Multi-National Security Transition Command-Iraq and reprogramming roughly \$3 billion in IRRF 2 allocations from the water, electricity, and other large infrastructure sectors to increase funding for security, rule-of-law, and related programs.<sup>278</sup>

In May 2005, the Congress appropriated an initial tranche of \$5.39 billion to the new Iraq Security Forces Fund for MNSTC-I's use. The ISFF bolstered the training and equipping of Iraq's Ministry of Defense and Interior forces.<sup>279</sup> Creating the new fund was crucial because, from mid-2004 through mid-2005, lethal security incidents became commonplace, averaging more than 90 per day.<sup>280</sup> They continued to rise through 2006, peaking in 2007 at 185 per day (see Figure 5.9). The task of establishing Iraqi forces capable of providing internal security and protecting the country faced extraordinary challenges in 2006 and early 2007, when Iraq slipped into a state of virtual civil war (see Figure 5.9).

In response, U.S. investment in the sector massively increased, helping security program managers develop an ISF that could



FIGURE 5.9

## Security Incidents, Fatalities, and Transfer of Security Control in Iraq, 1/2004–12/2010

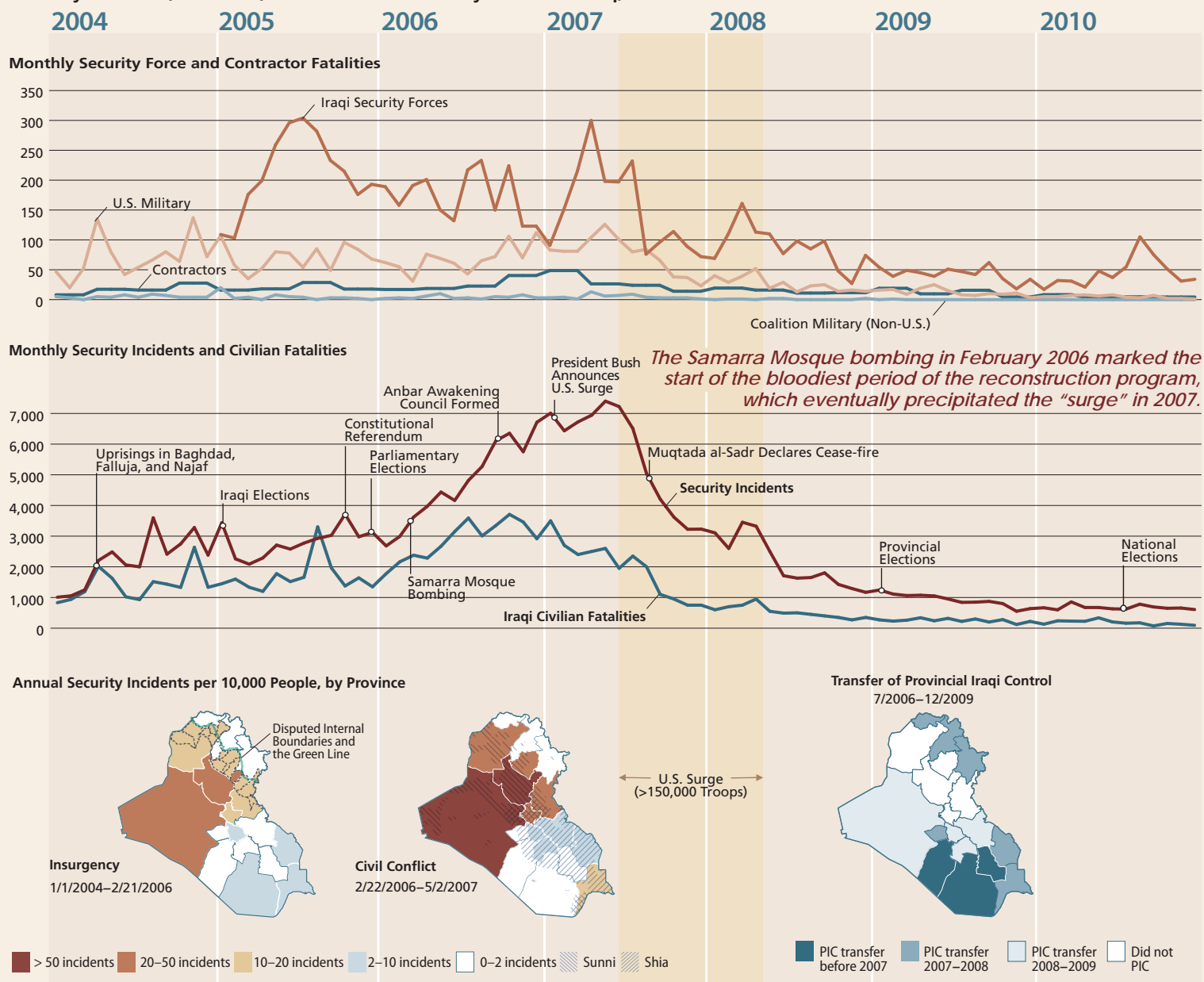
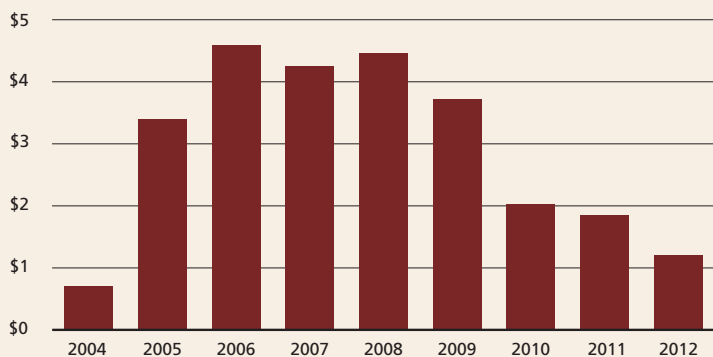
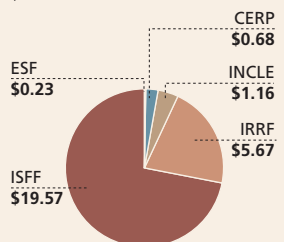


FIGURE 5.10  
**Security and Rule of Law: Expenditures, by Year, 2004–2012**  
 \$ Billions



*The United States invested heavily in ISF development during 2005–2008 to enable Iraq to assume security control in 2009.*

FIGURE 5.11  
**Security and Rule of Law: Cumulative Obligations, by Fund, as of 9/30/2012**  
 \$ Billions



support the U.S. counterinsurgency strategy in 2007 (see Figure 5.10). The “surge” of more than 25,000 U.S. troops into the country complemented increases in the pace of ISF training, a renewed tactical rebuilding emphasis, and the creation of the Sons of Iraq program. Funded with Commander’s Emergency Response Program money, the SOI effort paid for 100,000 mostly Sunni men to work with the Coalition rather than fight it. While investments in the SOI and in Iraq’s military and police forces paid off, support for anticorruption and other rule-of-law efforts—so crucial to the long-term stabilization of Iraq—proved less robust and thus less successful.<sup>281</sup>

By early 2008, levels of violence had significantly diminished.<sup>282</sup> The improved security stemmed from several factors, including the surge in troops, the deployment of competent ISF personnel, the success of the SOI program,<sup>283</sup> and an August 2007 cease-fire declared by Muqtada al-Sadr, who controlled the violent Mahdi Army, a Shia militia.<sup>284</sup> These improvements permitted U.S. military authorities to resume the transfer of regional security responsibilities to Iraqi control.<sup>285</sup>

Despite substantial surge-driven salutary developments in the security sector, Iraq was still a dangerous place in early 2009.<sup>286</sup> Thus, the ISF continued to receive substantial training and equipping from the United States over the next four years. This investment paid off. By 2012, the number of daily security incidents amounted to a tiny fraction of 2007 levels. But targeted attacks on security personnel,



*Iraqi Security Forces pass in review at a parade in January 2011. (GOI photo)*

assassinations of government and tribal leaders, and occasional mass-casualty bombings continued to inflict terror.<sup>287</sup>

The ethnic divide between Kurdish and Arab populations worsened in 2011 and 2012 as the KRG pressed claims to exploit hydrocarbon resources in disputed areas. In Kirkuk, the Kurds looked ready to fight in the spring of 2011, deploying *Peshmerga* militia to advance its claims. Baghdad pushed back, sending armed troops to the city; but, with U.S. intervention, conflict was averted.<sup>288</sup>

Establishing a secure and safe environment in Iraq and enforcing the rule of law proved to be daunting, lengthy, and expensive tasks, consuming about half of the funds the United States poured into the reconstruction effort. From 2003 to 2012, the United States obligated \$27.30 billion and expended \$26.16 billion in this reconstruction area. Almost 72% of all obligations came from the ISFF (see Figure 5.11).<sup>289</sup>

The United States obligated almost 80% of security and rule-of-law funding by January 2009 (see Figure 5.12). Nearly 70% of these funds had been expended by that time, averaging \$3.48 billion per year. The money chiefly went to rebuild security infrastructure, train and equip the ISF, and field them in the counterinsurgency fight. After 2008, U.S. expenditures fell to an average of \$2.20 billion per year, with spending focused on large equipment purchases, specialized training programs,

and sustainment initiatives designed to support the maturing ISF.<sup>290</sup>

Almost 93% of all U.S. outlays for security and rule-of-law programs went to rebuilding the Iraq's military and police forces, border guards, and facilities protections units. The remaining \$1.83 billion went to justice and corrections programs to rebuild Iraq's courts and prisons and to provide infrastructure security (see Figure 5.13).<sup>291</sup>

## Rebuilding the ISF

As of September 2012, the United States had obligated \$25.26 billion and expended \$24.33 billion on training, equipping, and sustaining the ISF and providing infrastructure for the MOD and MOI. More than 57% of those expenditures went to MOD activities, while the MOI received 38%. Expenditures on "related activities," benefiting both the MOD and MOI, accounted for just over 4%. More than one-third of the expenditures funded equipment and transportation for the ISF, while 24% was spent on infrastructure, 23% on training, and 13% on sustainment activities (see Figure 5.14).<sup>292</sup>

After disbanding the Iraqi Army in 2003, the CPA sought to establish modest police forces using Iraqi funding from the Development Fund for Iraq and limited U.S. funding from IRRF 1.<sup>293</sup> It authorized new programs like the CERP and Commander's

FIGURE 5.13  
**Security and Rule of Law: Expenditures, by Sector, FY 2004–FY 2012**  
\$ Billions

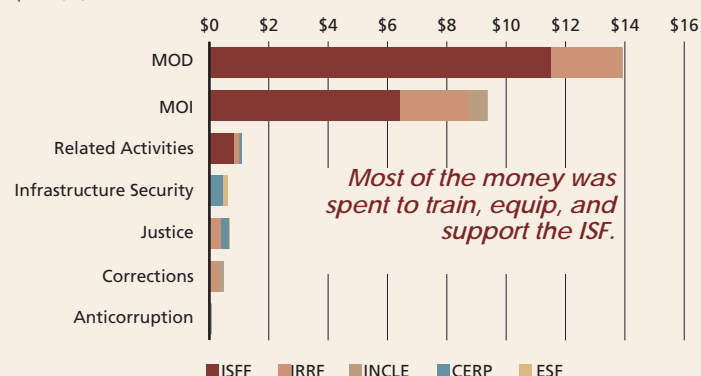
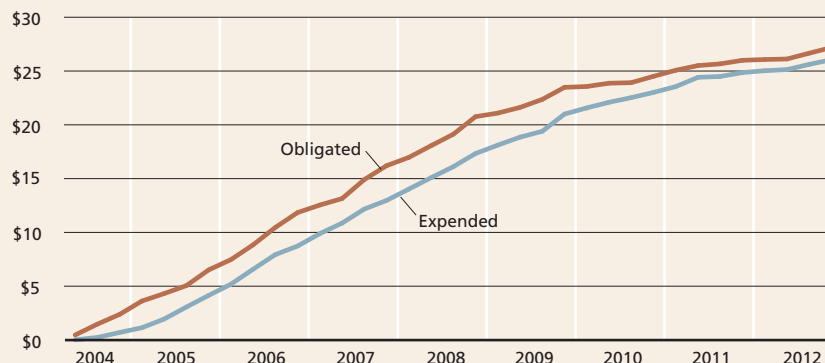


FIGURE 5.12  
**Security and Rule of Law: Cumulative Obligations and Expenditures, FY 2004–FY 2012**  
\$ Billions



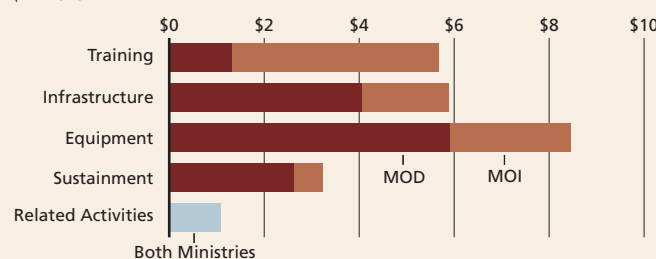
*Almost 80% of all funding for security and rule-of-law programs was obligated prior to January 2009.*

Humanitarian Relief and Reconstruction Program to help U.S. commanders respond to the urgent humanitarian relief and reconstruction requirements of local populations.<sup>294</sup>

The Iraqi military and police forces expanded rapidly from 2004 to 2006, adapting to the counterinsurgency mission. Their training accounted for more than 40% of U.S.-funded security expenditures during this period. Importantly, these programs supported ISF counterinsurgency training, with graduates moving out to field operations under the control of the Multi-National Corps-Iraq.<sup>295</sup>

Parts of the growing force structure constituted a conflation of

FIGURE 5.14  
**Expenditures To Rebuild the ISF, by Subactivity, FY 2004–FY 2012**  
\$ Billions



*More than one-third of ISF expenditures funded equipment and transportation, with most of it supporting the MOD.*

previously autonomous militias, many of them sectarian-based and sometimes attendant to an immediate commander's interests rather than the security institution itself.<sup>296</sup> These strains became most prevalent within the MOI. Tribal and community leaders frequently vetted police recruits, a process rife with politicization and patronage.<sup>297</sup> On the other hand, the Multi-National Security Transition Command-Iraq effectively oversaw the recruiting of trainees for the Iraqi Army, creating a diverse force not tied to a particular area, sect, ethnicity, or tribal group.<sup>298</sup>

Equipment became a priority from mid-2006 through the end of 2007 as the tempo of counterinsurgency operations increased. The United States spent \$2.03 billion on equipment during this span, amounting to about one-fourth of the equipment purchases made throughout the entire program. But meeting the ISF's requirements became problematic when loose accountability undercut equipment provision.<sup>299</sup> Moreover, the GOI commonly reported that it did not have enough of the necessary equipment to manage Iraq's challenging security environment.<sup>300</sup>

As the "surge" ramped up in 2007, the ISF began to meet broad Coalition targets on training and equipping,<sup>301</sup> with many IA units becoming capable of operating independently and controlling their own areas of responsibility.<sup>302</sup> ISF force strength grew through aggressive recruiting, including an initiative by the

Prime Minister to overfill counterinsurgency units and increase the number of IA battalions.<sup>303</sup>

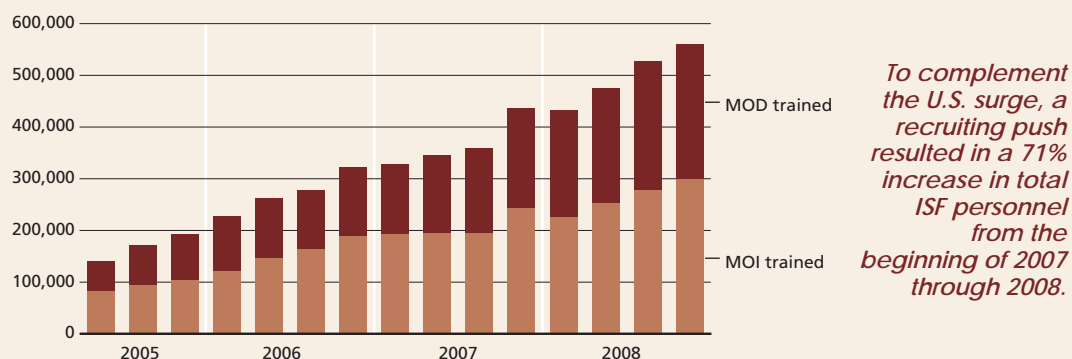
The ISF reportedly had a trained and equipped strength of more than 560,000 in December 2008, as transition of security authority to the GOI approached (see Figure 5.15). The Defense Department reported that 175 (of 179) MOD battalions were "conducting operations," as were 57 of 64 National Police units assessed.<sup>304</sup> But all were still dependent on the Coalition for intelligence, logistics, and sustainment.<sup>305</sup>

The security sector program managers emphasized infrastructure spending as well, which totaled almost \$5.9 billion. Most of the spending (\$4.2 billion) occurred during 2004–2008, when bases, forts, police stations, and training facilities were built or rehabilitated to support the expanding ISF. Building up the security infrastructure became haphazard during violent periods, which inevitably slowed completion rates.<sup>306</sup>

After 2009, the U.S. government focused expenditures on equipping, training, and sustaining the MOD as it transitioned from a force with an internally focused mission to one capable of providing defense against external threats.<sup>307</sup> The broad range of equipment purchases in 2009–2010, totaling \$2.29 billion, focused on acquiring artillery, armor, and heavy wheeled equipment to support this evolution. Similarly, the \$1.83 billion expended during this period on training reflected an increased operational tempo for police forces under the MOI's aegis.<sup>308</sup>

By late 2011, Iraq reported that its combined security strength amounted to more than 930,000 trained security forces, 70% of which belonged to the MOI (see Table 5.6).

FIGURE 5.15  
Iraqi Security Forces, 2005–2008



### MOD Support

As of September 2012, the U.S. government expended approximately \$13.90 billion to equip and train personnel, construct critical infrastructure, and provide sustainment and logistics support for Iraq's Ministry of Defense.<sup>309</sup>

### MOD Equipment and Transportation

Early in the program, equipment and transportation purchases embraced a wide range of items necessary to meet ISF force-



TABLE 5.6  
Iraqi Security Forces, as of 12/31/2011

Service	Assigned Personnel	
<b>Ministry of Defense</b>	Iraqi Army	200,000
	Training and Support	68,000
	Air Force	5,053
	Navy	3,650
	Army Air Corps	2,400
	<b>Total MOD</b>	<b>279,103</b>
<b>Ministry of Interior</b>	Iraqi Police	325,000
	Training and Support	89,800
	Facilities Protection Service	95,000
	Department of Border Enforcement	60,000
	Iraqi Federal Police	45,000
	Oil Police	35,000
	<b>Total MOI</b>	<b>649,800</b>
<b>Counter-Terrorism Force</b>		<b>4,200</b>
<b>Total</b>		<b>933,103</b>

generation requirements.<sup>310</sup> These included outfitting infantry, intelligence, artillery, armored, and bomb-disposal units. After 2009, half of all MOD-directed expenditures purchased equipment.<sup>311</sup>

The GOI also procured equipment through the FMS program and made direct purchases outside of the program. The Defense Security Cooperation Agency administered these procurements—predominantly for the Ministry of Defense—which included the purchase of heavy mechanized equipment and artillery, training and cargo aircraft, and marine assets (such as patrol boats), together with related training and sustainment contracts. One of the most important cases delivered 140 M1A1 tanks by August 2012 at a cost of \$810 million. Two others bought 36 F-16 fighter aircraft, with base development and pilot and maintenance personnel training well underway in 2012.<sup>312</sup>

In an unusual innovation, the FMS program in Iraq used U.S. funds (from the Iraqi Security Forces Fund) for procurements, calling them “pseudo-FMS” cases. From 2005 through 2012, these pseudo-

*SIGIR Audits 06-032 and 09-014*

## Logistics and Sustainment: Breaking “Use It Till It Breaks”

In 2006, the Commander of the Multi-National Force-Iraq cited logistics and sustainment as the keys to the Iraqi Security Forces assuming the lead in provincial security. A 2006 SIGIR review of ISF preparations to assume logistics operations found significant challenges, including incomplete planning for transitioning from U.S. to GOI management and operations.

With weak ministerial capacity at both the MOD and MOI, the United States had to develop the ministries’ logistics and sustainment capabilities. This effort—part of the formidable challenge of changing Iraq’s “use it till it breaks” culture—entailed awarding an enormous Global Maintenance and Supply Services contract.

In examining the contract’s ISFF task orders that supported the Iraqi Army, SIGIR found that three of them, totaling \$628.2 million,

had been modified 161 times, which added \$420 million to the contract’s cost. SIGIR also found that:

- Documentation did not support contractor costs.
- Financial data on purchases did not reconcile.
- The MOD refused to accept responsibility for maintenance and supply operations, causing Multi-National Security Transition Command-Iraq to extend the period of contractor performance at U.S. expense.

Although the task orders provided significant logistics support to the Iraqi Army, the effort fell well short of achieving the goal of training Iraqi Army personnel to perform maintenance functions and operate a supply system. “Use it till it breaks” lives on.

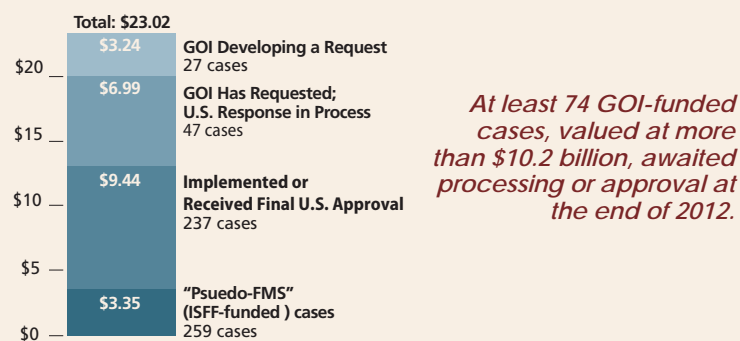


*The Depot Distribution Central Operation storage facilities at Camp Taji was completed in November 2010. (USACE photo)*

FMS cases purchased aircraft, naval vessels, police vehicles, tanks, and armored personnel carriers. Peak expenditures, amounting to almost \$800 million, occurred in the fourth quarter of FY 2009, purchasing helicopters, vehicles, weapons, and spare parts through these cases.<sup>313</sup>

Through September 2012, the FMS program in Iraq provided 496 separate cases valued at \$12.79 billion—237 FMS cases funded by the GOI for about \$9.44 billion and 259 pseudo-FMS cases funded by the United States through the ISFF for about \$3.35 billion. An additional 74 cases, with an estimated value of \$10.23 billion and all funded by the GOI, were in various stages of request and approval at the end of FY 2012 (see Figure 5.16).<sup>314</sup>

FIGURE 5.16  
Current and Prospective FMS Cases, as of 9/30/2012  
\$ Billions



### MOD Infrastructure

The United States initially met the infrastructure needs of the MOD through large outlays of the IRRF, with more than \$1 billion expended to renovate or construct military bases. ISFF expenditures on infrastructure through the end of FY 2008 amounted to an additional \$2.2 billion. But spending fell sharply thereafter when the Congress prohibited the use of ISFF money for new infrastructure projects. As of September 2012, the United States had expended a combined total of nearly \$4.05 billion to renovate, expand, and construct MOD bases.<sup>315</sup> See Table 5.7 for selected projects.



USF-I instructors train Iraqi Army soldiers to maneuver M1A1 tanks purchased by the Ministry of Defense through the U.S.-administered FMS program. (U.S. Army photo)



The renovated Iraqi Ministry of Defense headquarters in Baghdad.

### MOD Training

Military program managers spent a total of \$1.32 billion to train MOD forces, with more than \$850 million of that amount expended by the end of 2008. The build-up of personnel boosted MOD's cumulative force to more than 200,000.<sup>316</sup> But, as with the police, the number of troops reporting for duty fell continually below desired levels, with AWOL rates exceeding 3% per month.<sup>317</sup>

As MOD forces rapidly expanded, senior non-commissioned officer and commissioned officer positions became difficult to fill, with vacancy rates of 30% or more persisting into 2008.<sup>318</sup> By the end of that year, thanks to a new program to recruit and train officers and NCOs from the Saddam era, almost 100,000 more senior personnel (85% of whom were NCOs) were brought into the Iraqi Army.<sup>319</sup> As the January 2009 transfer of security authority approached, the United States embedded 183 Military Transition Teams at all levels of the Iraqi military to assist units in achieving full capability.<sup>320</sup>

After 2009, ISF training comprised a stable, albeit smaller, portion of overall U.S. expenditures. Blanket training orders funded by the ISFF (administered as pseudo-FMS cases) for Iraq's Army, Navy, and Air Force complemented a wide range of GOI-funded training activities procured through the FMS program.<sup>321</sup>

TABLE 5.7

**Major U.S.-funded Security Construction Projects**

\$ Millions

Project Name	Province	Contractor Name	Contract Award Date	Completion Date		Fund	U.S. Cost
				Original	Actual		
Taji National Maintenance Depot Project	Baghdad	AECOM Government Services	12/31/2007	12/31/2009	12/31/2009	ISFF	220.0
Baghdad Police Academy	Baghdad	Parsons Delaware, Inc., Laguna Construction, Others	5/6/2004	1/1/2005	Various	IRRF 2, ISFF	137.6
Tallil Military Base	Thi-Qar	Weston Solutions, Inc.	4/14/2004	3/31/2005	1/29/2006	ISFF	119.5
Camp India Facilities at Falluja	Anbar	Environmental Chemical Corporation	11/7/2004	5/1/2005	3/31/2008	IRRF 2	83.4
Military Base at Kirkuk	Tameem	Environmental Chemical Corporation	4/15/2004	1/15/2005	3/15/2006	IRRF 2	73.6
Al-Rasheed Brigade Base	Baghdad	Tetra Tech Inc	12/17/2004	11/21/2005	7/2006	IRRF 2	64.0
Renovate Base at Habbaniyah	Anbar	Environmental Chemical Corporation	7/23/2005	8/1/2005	4/30/2007	IRRF 2	63.5
Renovate An Numaniyah Military Base, Phase 1B	Wassit	Environmental Chemical Corporation	4/22/2004	1/15/2005	6/30/2005	ISFF	57.4
Federal Police Sustainment Brigade	Baghdad	Areebel Engineering & Logistics	9/27/2008	10/19/2010	Ongoing	ISFF	47.7
Renovate Ministry of Defense Headquarters	Baghdad	Laguna Construction Co.	3/26/2004	4/30/2005	5/31/2005	IRRF 2	31.5

**MOD Sustainment**

From 2005 through 2008, the United States expended nearly \$1.4 billion to sustain the MOD. These expenses included operations and maintenance services, contractor-delivered logistics support, and life support. The MOD did not have a logistics and sustainment capability when it assumed full security authority in 2009, and an additional \$1.2 billion in U.S. expenditures, spent from 2009 to

2012, closed that gap. To ameliorate its logistical problems, the GOI procured sustainment contracts from U.S. providers.<sup>322</sup>

**MOD Weaknesses**

While significantly more advanced than the MOI at the time of the U.S. troop departure, Iraq's MOD lacked critical capabilities in logistics, intelligence, and operational sustainment. Weaknesses in counterterrorism and intelligence capabilities at the tactical, operational, and cross-ministry levels impeded collaboration and information sharing throughout the national security framework.<sup>323</sup> At the end of 2012, Iraq had no fixed-wing combat-air capability to defend its airspace and only a small fleet of littoral patrol vessels to guard its coastline and the vital infrastructure that supports oil exports.

**MOI Support**

The United States expended \$9.35 billion to train, staff, and equip Iraq's police forces.<sup>324</sup> The CPA and then State, through its Bureau of International Narcotics and Law Enforcement Affairs, initially managed support for the MOI.

With the stand-up of MNSTC-I in late 2004, Defense Department



*Iraqi soldiers conduct operations as part of a live-fire exercise under USF-I supervision in northern Iraq on February 24, 2011. (USF-I photo)*



*SIGIR Audit 11-004*

## Iraq Special Operations Force: Special Results but Spurious Control

As the security situation in Iraq deteriorated, the Secretary of Defense directed the formation of a new Iraqi counterterrorism capability, the Iraq Special Operations Force. Army Rangers and Navy SEALs took on the training mission, funded in part with \$237 million in U.S. rebuilding money.

In a review of the program, SIGIR auditors determined that the ISOF could conduct independent operations and maintain equipment and facilities. The program succeeded; the ISOF played important roles during the “Surge,” providing a force of more than 4,100 expertly capable soldiers deployed throughout Iraq.

One flaw uncovered in SIGIR’s review: USF-I did not account separately for funds used to equip and provide infrastructure for ISOF training, so the total costs of the program remained unknown. The ultimate success of

the ISOF is in the hands of the GOI, with the most troubling development being the move of ISOF control from the MOD to the Office of the Prime Minister.



*Iraqi Special Forces commandos in Basrah prepare an assault after being dropped off by Iraqi Army helicopters during a joint military exercise in April 2011. (USF-I photo)*

military organizations in Iraq assumed responsibility for the program from State, assigning INL to oversee contracts for the police-advisor portion the program. When U.S. troops withdrew in 2011, responsibility for the program transitioned back to INL, which runs the continuing effort through the Police Development Program.<sup>325</sup>

### MOI Equipment, Infrastructure, and Sustainment

The United States obligated \$2.03 billion for MOI equipment. By the time Iraq assumed responsibility for security in 2009, the United States had expended most of the sector’s funding. About \$1.0 billion purchased uniforms and personal body armor, and \$500 million bought M117 Armored Security Vehicles and support.<sup>326</sup>

The MOI received obligations of \$1.43 billion in infrastructure support, which supported the construction of training centers, police stations, and border forts, some of which SIGIR inspected and reported on. Selected projects are included in Table 5.7. Obligations to cover life support and other sustainment costs for the MOI totaled \$660 million.<sup>327</sup>

### MOI Training

The United States obligated \$5.61 billion and expended \$5.44 billion on MOI training.<sup>328</sup> Unlike the MOD, which completely rebuilt its force structure, the MOI’s force-base came from the prior regime. But the situation was chaotic in the summer of 2003. Only small numbers of police reported regularly for duty, and under-funded training plans, aggravated by the CPA’s use of threats to try to get police to return to duty, produced few results.<sup>329</sup> Some security personnel, like the Facilities Protection Service, appeared to be little more than a mask for various sectarian and militia elements within ministries.<sup>330</sup>

In May 2004, NSPD 36 assigned the mission of organizing, training, and equipping Iraq’s security forces (including the police) to the U.S. Central Command, which established MNSTC-I to oversee the mission. INL awarded a large multiyear police-training contract in early 2004 to provide police-training advisors for the U.S. program. Although other U.S. agencies and other nations provided additional advisory support, the contract engaged the largest contingent of trainers. State managed the contract for the advisors, providing logistical support, even after Defense took over MOI training in mid-2004. SIGIR auditors determined that INL lacked sufficient personnel to adequately oversee the contract, concluding that \$2.5 billion was vulnerable to waste and fraud.<sup>331</sup>

MNSTC-I assumed police-training duties in June 2004. The already-operational Civilian Police Assistance Training Team became a subordinate command to MNSTC-I. Additional U.S. military units provided police training at the local level. The Iraq Training and Advisory Mission subsumed MNSTC-I and its subordinate units.<sup>332</sup>

In 2006, Iraqi instructors assumed responsibility for providing most of the academic training for the MOI. MNSTC-I continued to advise and assist at the police training centers, with police training teams supporting police stations. The GOI assumed responsibility for all academic training and most of the advanced training courses by December 2008, with U.S. military and police advisors continuing to provide advice and quality control.<sup>333</sup>

The number of recruits usually exceeded the capacity of the police-training program, which put a constant strain on the training cycle. The “recruit-to-train” mode prioritized basic training over training for senior personnel in a rush to get police into the field during the



SIGIR observed a riot-response exercise during a visit to an Iraqi police training center in April 2010.

insurgency.<sup>334</sup> Expansion of the Baghdad Police College, which received \$96.5 million in IRRF and ISFF funds, increased police training rates in early 2008, reducing bottlenecks.<sup>335</sup>

Police forces under the MOI's aegis in 2008 totaled approximately 400,000.<sup>336</sup> Facilities Protection Service personnel were formally integrated into the MOI over time, but they served directly under the ministries whose facilities they were assigned to protect. The core police forces—the Iraqi Police, the National Police, and the Department of Border Enforcement—usually incorporated militias that had agreed to be “integrated.”<sup>337</sup> “Ghost employees” (those who received paychecks but did not work) and attrition were significant problems among their ranks.<sup>338</sup>

Many police elements within the MOI suffered from corruption and sectarianism, but these afflictions particularly affected the National Police. The NP received priority training and equipping from MNSTC-I, but its force structure had been pieced together from Saddam-era commando units and Shia militias.<sup>339</sup> Accused of frequent human-rights abuses,<sup>340</sup> the NP underwent extensive “re-bluing” (retraining and sifting out) during 2006–2008.<sup>341</sup>

In 2010, when the State Department began planning to take over police training, the actual capabilities of the Iraqi police were still unknown. A SIGIR review of the program in October 2010 determined that no formal assessments of capabilities had ever

*SIGIR Audits 11-003, 12-006, and 12-020*

## Audits Save Dollars: Downsizing the Police Development Program

In 2009, U.S. officials began planning the transfer of responsibilities for managing the support to Iraq's police forces from the Department of Defense to the Department of State. As originally conceived, State's Police Development Program was to be a five-year, multibillion-dollar effort—the largest single State Department program worldwide—involving 350 police advisors at three hub locations across Iraq. In an October 2010 audit report, SIGIR expressed concerns about a variety of planning shortfalls, including the failure to execute a comprehensive assessment of the police forces' capabilities.

A follow-up audit found that only 12% of program funds would be used to pay for advising, mentoring, and developing Iraqi police, with the other 88% funding security and life support. Moreover, the Senior Deputy Minister of Interior told SIGIR that he had serious doubts about the efficacy of the PDP. He said that Iraq did not need it as it was then conceived.

In 2012, State downsized the program to 35 police advisors, one-tenth the original number. This substantially reduced program costs, but not before at least \$206 million was spent on facilities that would never be used for their intended purpose.



INL spent more than \$100 million renovating facilities at former Forward Operating Base Shield, which was to be the main PDP basing area, before terminating construction, removing all advisors from the site, and turning the property over to the GOI.

been made, as was required. State's original plans for the Police Development Program envisioned an ambitious \$2.09 billion effort.<sup>342</sup> In response to SIGIR audits, the findings of an INL review, and the desires of the MOI, State significantly reduced the scope of the PDP, implementing a new program (called PDP 2) in 2012. PDP 2 focuses on, among other things, antiterrorism and organized crime, forensic evidence analysis, information technology, and border security.<sup>343</sup>

### MOI Weaknesses

In September 2012, some MOI police forces failed to meet minimum operational standards. Only the Federal Police and the Oil Police were assessed as operationally capable. The Iraqi Police, Department of Border Enforcement, and Port of Entry services demonstrated improving technical skills, but MOI security forces generally suffered from funding gaps, weak command and control, and a poor logistics system.<sup>344</sup>



SIGIR conducted project surveys of 21 border forts located along the Iraq-Iran border.

#### *SIGIR Audit 11-010*

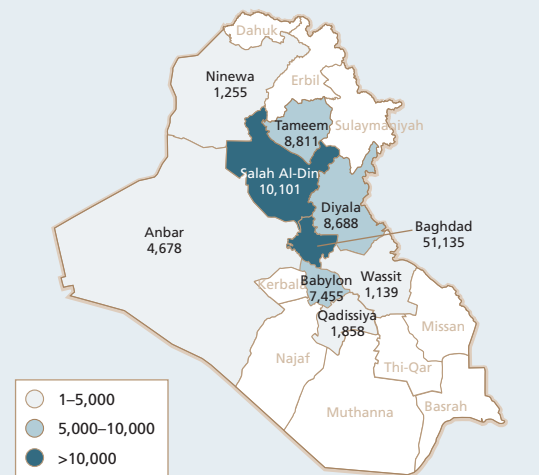
### Sons of Iraq: Work, Don't Fight

Insurgent attacks in 2006 spiked, particularly in western Iraq. While Sunni tribes supported the growth of al-Qaeda in Iraq—the chief catalyst of renewed violence—attacks began to hit local citizens, particularly in Anbar province. This caused some Sunni leaders to seek cooperation with Coalition forces in what came to be called the “Anbar Awakening.” DoD credited these leaders with helping to improve security in tribal areas.

To advance the Awakening, Multi-National Corps-Iraq began to award CERP contracts in June 2007 chiefly to employ Sunnis. The leaders agreed to keep their people off the battlefield in exchange for CERP-funded jobs providing security for buildings, checkpoints, and neighborhoods.

This effort, known as the “Sons of Iraq” program, entailed approximately 780 separate agreements calling for the stationing of almost 100,000 in 9 provinces across Iraq. The sheer number of agreements and personnel involved made this the largest CERP program in Iraq. SIGIR noted in its review of the SOI program that the contracting process, which spent

\$370 million in CERP funds, was far from transparent. Financial controls were weak, program managers could not tell whether SOI members received their U.S.-funded salaries, and Defense was unable to provide any evaluations of the program’s outcomes.



## Infrastructure Security

Obligations for infrastructure security activities totaled almost \$670 million, with 55% (\$370 million) supporting the CERP-funded Sons of Iraq program.<sup>345</sup> Throughout the SOI effort, which began in June 2007, the Multi-National Corps-Iraq awarded contracts to sheiks and other local leaders to provide security at checkpoints, buildings, neighborhoods, and other key locations. The program aimed to convert former insurgents and passive supporters into participants in the U.S. counterinsurgency effort, thereby reducing overall levels of violence.<sup>346</sup>

The ESF-funded Infrastructure Security Protection program addressed facilities protection. Three U.S. entities coordinated the effort—the Iraq Transition Assistance Office, U.S. Army Corps of Engineers, and Energy Fusion Cell. Initiated in 2006, the program sought to reduce the incidents of insurgent damage to the oil pipeline system, electrical distribution system, and other important infrastructure throughout Iraq.<sup>347</sup>

## Rule-of-law Programs

As of September 2012, the United States had obligated at least \$1.37 billion and expended \$1.20 billion for rule-of-law programs in Iraq. The majority of rule-of-law funding (57%) was spent on justice programs, predominantly to expand the capacity of Iraq’s courts. Training for the Iraqi Corrections Service and funding for prison construction accounted for 38% of spending, while 5% was expended on anticorruption programs. The IRRF provided support for more than 57% of all rule-of-law activities early in the reconstruction program (see Figure 5.17).<sup>348</sup>

Pre-war planning efforts placed considerable emphasis on establishing the rule of law in Iraq. In 2002, working groups specifically addressed the needs of rule-of-law institutions and the fight against institutionalized corruption that infected the government.<sup>349</sup>

As the CPA stood up, it incorporated rule-of-law and anticorruption edicts into the process for Iraq’s growth as an open and democratic society.<sup>350</sup> But these goals never received the funding to realize the necessary organizational capacity.<sup>351</sup> Subsequent U.S. programs assigned individual agencies with responsibilities for various aspects



of the rule-of-law programs, but none had charge of coordinating the disparate efforts.<sup>352</sup>

Beginning in 2003, judges became targets of frequent assassination attempts, with 49 judges murdered by 2012.<sup>353</sup> Iraq continues to struggle to protect its judges from terrorist activity, and their security personnel still do not carry firearms because the MOI has yet to grant them weapon permits. The court system contends with human rights issues, including reported acts of torture and retaliatory prosecutions by police and military authorities. Judges have expressed frustration over a lack of legal tools available to confront abuses by security forces.<sup>354</sup>

### Justice Programs

Immediately after the fall of Saddam, legal and law-enforcement experts from the United States and other Coalition countries assessed the status of the Iraqi judicial system, finding it in a state of chaos.<sup>355</sup> Iraq's court system received the largest portion of rule-of-law funding, with nearly \$771.8 million obligated as of September 2012, for construction and non-construction projects. Of the \$681.1 million expended, the IRRF funded more than half.<sup>356</sup>

IRRF expenditures supported the construction and upgrade of court facilities, as well as the building of witness protection sites across the country. Most rule-of-law money obligated from 2003 to 2005 funded infrastructure projects under a design-build contract awarded to Parsons Delaware; but the United States terminated that contract after court-related projects suffered significant deficiencies and cost overruns. The largest construction project was the \$21.5 million Anbar Judicial Complex completed in June 2009. The United States contributed \$12.8 million from the IRRF to the project, which a SIGIR inspection found to be successful.<sup>357</sup> Table 5.8 includes major U.S.-funded judicial facilities.

Soft reconstruction projects included training by the U.S. Marshals Service, witness protection, court-staff training, and computer instruction, as well as instruction in technical investigative methods and the development of standard operating procedures for security search techniques. The IRRF funded several capacity-development programs through the Justice Integration Project, Major Crimes Task Force, and the Public International Law and Policy Group. Important

equipment purchases included armored cars and vehicles for judges and witnesses, security equipment, and furniture for courthouses and judicial complexes.<sup>358</sup>

INCLE and ESF funds supported these rule-of-law programs.<sup>359</sup>

- **Judicial outreach**—From 2003 to 2012, INL funded DoJ's Office of Overseas Prosecutorial Development, Assistance, and Training with about \$24 million to deploy criminal prosecutors to Iraq as Resident Legal Advisors to assist and mentor officials in the Higher Judicial Council and the Central Criminal Court of Iraq.
- **Judicial development**—INL provided about \$81 million for training on forensic evidence and training for judicial investigators, the Regime Crimes Liaison Office, improved access to justice and treatment of juveniles in detention, review of the Iraqi Criminal Penal Code, and efforts to enhance judicial independence.
- **Court administration**—INL spent about \$33 million to increase the effectiveness of the administration of the Iraqi court system.
- **Judicial security**—INL provided \$60 million for judicial security, including mentorship and technical support by the U.S. Marshals Service.

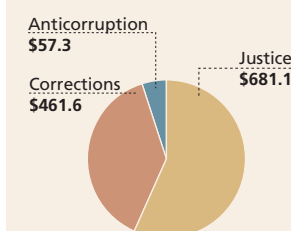


The U.S.-constructed Shatt al-Arab Courthouse in Basrah province was completed in June 2009. (OPA photo)

FIGURE 5.17  
**Expenditures for Rule-of-law Activities from Major Funds, as of 9/30/2012**

\$ Millions

**By Sector**



**By Fund**

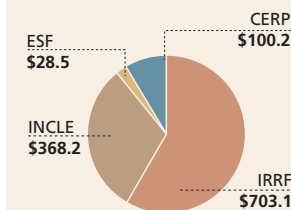


TABLE 5.8  
**Major U.S.-funded Judicial and Corrections Construction Projects**  
 \$ Millions

Project Name	Province	Contractor Name	Contract Award Date	Completion Date		Fund	U.S. Cost
				Original	Actual		
Nassiriya Prison	Thi-Qar	Parsons Delaware, Inc., al-Bare'a Engineering, al-Basheer Company	5/11/2004	11/2/2005	3/29/2010	IRRF 2, INCLE	68.1
Khan Bani Sa'ad Prison	Diyala	Parsons Delaware, Inc., al-Bare'a Engineering Co	5/11/2004	3/31/2006	5/29/2007	IRRF 2	38.3
Chamchamal Correctional Facility	Sulaymaniyah	Chroo Group, Ltd.	11/1/2007	1/23/2009	3/18/2009	ESF	28.7
Iraqi Special Tribunal Court	Baghdad	Parsons Delaware, Inc.	8/19/2004	4/27/2005	4/15/2005	IRRF 2	19.3
Fort Suse Prison	Sulaymaniyah	Daban Company	9/10/2007	8/18/2009	3/8/2010	INCLE	13.4
Anbar Rule of Law Complex	Anbar	ALMCO Limited	4/25/2008	5/15/2009	6/15/2009	IRRF 2	12.8
Rusafa Courthouse & Witness Security	Baghdad	Tama Company	8/20/2006	4/28/2008	8/28/2008	IRRF 2	12.5
New Basrah Courthouse	Basrah	Al-Dayer United Co.	6/9/2006	3/1/2008	9/25/2008	IRRF 2	11.0
Central Court, Karkh	Baghdad	Al-Juthoor Contracting Co.	4/27/2005	8/14/2006	8/12/2007	IRRF 2	10.4
Judicial Education & Development Institute	Baghdad	Al-Barih General Contracting	9/13/2008	6/5/2009	9/25/2010	INCLE	10.0

*SIGIR Audits 06-021, 07-007, 08-008, 08-016, and 08-023*

## Anticorruption Drumbeat, but Downbeat Results

Corruption daunted Iraq in the Saddam era, and it continued to dog the country after his fall. A 2006 SIGIR audit urged reforms to programs to help Iraq fight its corruption problem, warning that other reconstruction priorities had diluted efforts to reduce GOI graft. But one year later, SIGIR found corruption getting worse. The Embassy eventually recognized the need to design and implement a comprehensive, integrated anticorruption strategy and began to advance such in 2008.

Two subsequent SIGIR reports found encouraging signs of progress, including the appointment of a senior official as the Coordinator for Anticorruption Initiatives at the Embassy. However, the effort lacked metrics and baseline data for assessing the program's impact on reducing corruption.

Further, State failed to move aggressively to secure the necessary funding to support a large and effective anticorruption program.



*GOI officials attend a COI seminar on transparency and accountability in May 2012. (GOI photo)*

## Corrections

USACE spent at least \$165 million to build prisons. The first two major projects—construction of the Khan Bani Sa'ad and Nassiriya correctional facilities—were awarded to Parsons Delaware in May 2004. USACE eventually terminated both for default after a combined expenditure of \$62 million. Parsons failed to make sufficient progress on the projects, to adhere to the construction schedule, and to control costs.<sup>360</sup>

Another contractor completed the Nassiriya prison in 2010, spending an additional \$37 million. But the Khan Bani Sa'ad facility remains unfinished, even after the expenditure of an additional \$7.2 million, resulting in a waste of almost \$40 million. The third-most expensive prison-construction project—the \$28.7 million Chamchamal Correctional Facility—finished on schedule in 2009 (but without a permanent power source).<sup>361</sup>

Table 5.8 includes major U.S.-funded prison construction projects. According to the International Criminal Investigative Training Assistance Program, U.S. projects added more than 6,000 beds to the Iraqi prison system.<sup>362</sup>

Rampant overcrowding burdened the Iraqi prison system. U.S. officials cited the inability of the GOI to process detainees as the primary reason; it often took months to check whether a detainee had an outstanding warrant. Moreover, the Ministry of Justice, which administers Iraq's corrections officers, controlled 22 prisons, while the MOI ran more than 1,200 small jails. Thus, the ministry with the necessary skills (the MOJ) lacked the required facilities to manage the many incarcerations associated with its cases.<sup>363</sup>

INL provided more than \$125 million for ICITAP activities to reconstitute the Iraqi Corrections Service. ICITAP managed corrections training and assistance programs through the end of 2011. In January 2012, it began a \$1.6 million Pre-trial Detentions Program, but the Iraqi government soon decided to forbid non-Iraqis from assessing its pretrial detention facilities. Thus, INL ended the program in June 2012.<sup>364</sup>

### Anticorruption

Corruption was the rule in Iraq under Saddam Hussein. It continued into the chaotic conditions of the early post-conflict years, draining resources from GOI programs. In 2006, Prime Minister al-Maliki referred to corruption as “a second insurgency.”<sup>365</sup>

Since 2003, the GOI's income from crude oil sales rapidly increased as did the magnitude of graft. Between 2004 and 2007, corruption's costs were estimated at \$18 billion. In a 2005 review, Iraq's Board of Supreme Audit concluded \$1.3 billion had been lost due to corruption in a series of MOD contracts.<sup>366</sup>

A 2012 BSA audit concluded that, of the roughly \$1 billion transferred out of Iraq each week via currency auctions conducted by the Central Bank of Iraq, up to \$800 million was laundered money transferred illegally under false pretenses. Calculated cumulatively over the course of a year, this presents the possibility that up to \$40 billion was leaving the country annually because of corruption.<sup>367</sup>

Early on, U.S. reconstruction authorities identified corruption as an important issue that threatened the goal of establishing an environment of trust and confidence within the Iraqi government. But they devoted relatively modest resources to combat the problem.<sup>368</sup>



*The \$29 million Chamchamal Correctional Facility was completed in March 2009.*

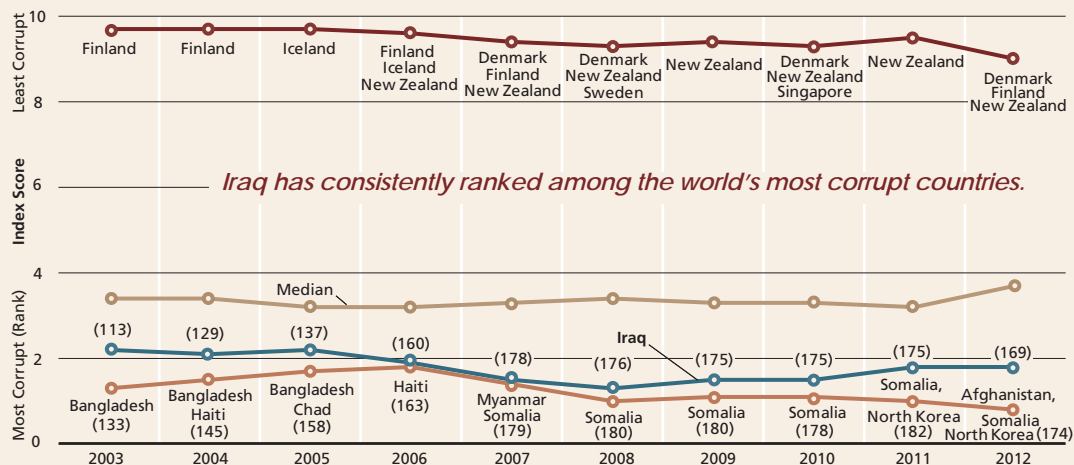
The CPA Administrator authorized a budget of \$35 million to implement the comprehensive reform of Iraq's anticorruption system. A total of \$20 million of this came from the Development Fund for Iraq, with \$15 million from IRRF 2. The varying initiatives called for drafting new legislation and the anchoring of anticorruption power in these three specific institutions:<sup>369</sup>

- **The Commission on Public Integrity.** Established in January 2004, the CPI ostensibly was to be the primary agent in the fight against corruption. The CPA charged it to investigate allegations against GOI officials and, if warranted, forwards them to the Central Criminal Court of Iraq for prosecution.<sup>370</sup>

The CPI enjoyed a productive start. In its first 18 months, it filed 541 cases against GOI officials, including 42 against ministers or



FIGURE 5.18

**Transparency International's Corruption Perceptions Index, Iraq vs. Other Countries, 2003–2012**

other high-ranking individuals. But the backlash was swift and severe. The GOI shielded many of the accused from prosecution by the use of a Saddam-era law, and, when cases did go to trial, the accused frequently were acquitted. The CCC-I's conviction rate during 2004–2007 was only 8%. To worse effect, 31 CPI employees were assassinated from 2004 to 2007. In August 2007, the CPI Commissioner fled to the United States, where he received political asylum. Efforts thereafter to revive investigative activity proved mostly unsuccessful, and the CPI (now known as the Commission of Integrity) is currently a marginally effective force.<sup>371</sup>

- Inspectors General.** Thirteen days after establishing the CPI, CPA Administrator Bremer signed an order creating a novel system of inspectors general in Iraq. Most were placed within GOI ministries for five-year terms with the power to audit ministry records and activities, conduct administrative investigations, and pursue allegations of fraud, waste, and abuse. The IGs were to report specific findings to their ministers and issue annual reports.<sup>372</sup>

The system faced challenges from the start. Although the 2004 order creating the IGs noted they could only be effective if provided adequate resources, few were forthcoming. On the day before the CPA's closure, Ambassador Bremer provided \$11 million to fund the new system. In 2005, the DoD OIG Investigations and Evaluations Directorate trained and advised IGs in the Ministries of Defense and Interior, continuing that work at least through 2008. And in 2007, the Department of State appointed a consultant to the IGs, who was responsible for training, mentoring, and advising the other ministries; but the position had no budget. SIGIR also provided IG training.<sup>373</sup>

Aside from inadequate funding, the IGs suffered an image problem that reduced their effectiveness. Created by the United States and inserted into a GOI that had no understanding of their mission, the IGs came to be seen as obstructers and even spies for the "U.S. occupiers." The GOI decided in early 2012 to eliminate some IGs at smaller ministries, and the Joint Anticorruption Council, a body responsible to the Council of Ministers, declared that all remaining IGs would periodically face an evaluation board comprising representatives from the Office of the Prime Minister, CoM, COI, and BSA.<sup>374</sup> The system's future is very much in doubt.

- Board of Supreme Audit.** In April 2004, the CPA issued an order to reconstitute the BSA, an agency first established during the British administration of Iraq in the 1920s. U.S. funding for the agency was limited. But the BSA prospered chiefly because it is well led and is recognized as the oldest and most authoritative anticorruption institution in the country. The BSA's role is similar to that of the Government Accountability Office in the United States. It is the GOI auditing agency with oversight of all public contracts.<sup>375</sup>

As of September 2012, the United States had obligated \$67.7 million for U.S. anticorruption efforts in Iraq, just under half funded by the INCLE (\$31.8 million) with the remainder coming from the IRRF (\$36.0 million). Despite this support for the fight against corruption, apparently little changed between 2003 and 2012.<sup>376</sup> As depicted in Figure 5.18, Iraq has been consistently perceived as being among the most corrupt countries in the world.

## Governance

For almost three decades prior to the 2003 invasion, Iraq suffered under a highly centralized government dominated by Saddam Hussein's repressive rule.<sup>377</sup> Presidential “elections” carried out by Saddam's dictatorial regime reflected its culture of corruption, with outcomes never in question. In 2002, for example, Saddam was re-elected with 100% of the vote.<sup>378</sup>

In 2003, prewar planners anticipated a rapid transfer of power to a new Iraqi government after Saddam's removal, with a hoped-for minimal disruption in government services. This calculation proved off the mark. Postwar looting and the exodus of government bureaucrats from public service—both voluntary and involuntary—caused a complete collapse in governance capacities. The country's broken system required a virtually complete reconstruction, literally and figuratively.<sup>379</sup>

The CPA established these goals for developing governance in Iraq:<sup>380</sup>

- a constitution drafted and approved by Iraqis
- institutions and processes to conduct free and fair elections
- measures to improve the effectiveness of elected officials and strengthening local government systems
- effective and fair justice systems
- respect for the rule of law and human rights
- creation of a vibrant civil society

Although the CPA laid the predicate for the eventual accomplishment of much of this, it realized little of it during its 14-month tenure.<sup>381</sup>

Through September 2012, the U.S. government obligated \$8.32 billion and expended \$7.48 billion to provide humanitarian relief, support democratic institutions, build government capacity, and grow public services in Iraq.<sup>382</sup>

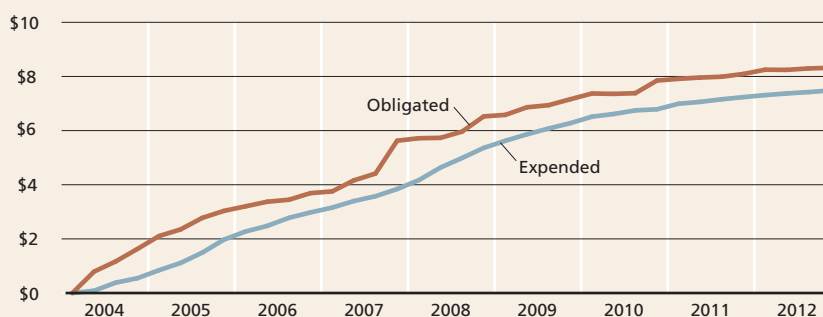
Early funding focused on programs and projects to restore public services, promote democracy, and build civil society. By early 2007, the U.S. government had obligated nearly half of the money for governance programs, including more than \$1.7 billion to improve Iraq's public services (see Figure 5.19). At the same time, the



Iraqi civilians and U.S. soldiers pull down a statue of Saddam Hussein in downtown Baghdad on April 9, 2003, symbolically marking the end of his regime. (AP photo)

FIGURE 5.19

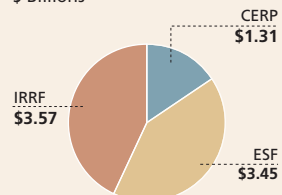
### Governance: Cumulative Obligations and Expenditures, FY 2004–FY 2012 \$ Billions



*Half of the expenditures occurred by the end of 2007.*

FIGURE 5.20

**Governance: Cumulative Obligations, by Fund, as of 9/30/2012**  
\$ Billions



U.S. strategy shifted toward capacity development. Funding for governance came from three sources—the IRRF, ESF, and CERP (see Figure 5.20). Responsible for about 44% of this reconstruction area's total obligations and expenditures, USAID served as the principal U.S. agency leading governance reforms in Iraq.<sup>383</sup>

## Democracy and Civil Society

As of September 2012, the U.S. government had obligated \$1.91 billion and expended \$1.82 billion to strengthen democratic governance and civil society in Iraq.<sup>384</sup> More than half of the funding came from the IRRF, with the remainder from the ESF.<sup>385</sup> USAID was responsible for more than \$1.6 billion (84%) of the total obligations.<sup>386</sup>

### Constitution and Elections

In November 2003, the CPA announced it would pass sovereignty to an interim Iraqi government by the end of June 2004. Among others, two important actions took place before that event:<sup>387</sup>

- an interim constitution (called the Transitional Administrative Law) was approved

- local caucuses elected leaders for the Iraqi Transitional National Assembly

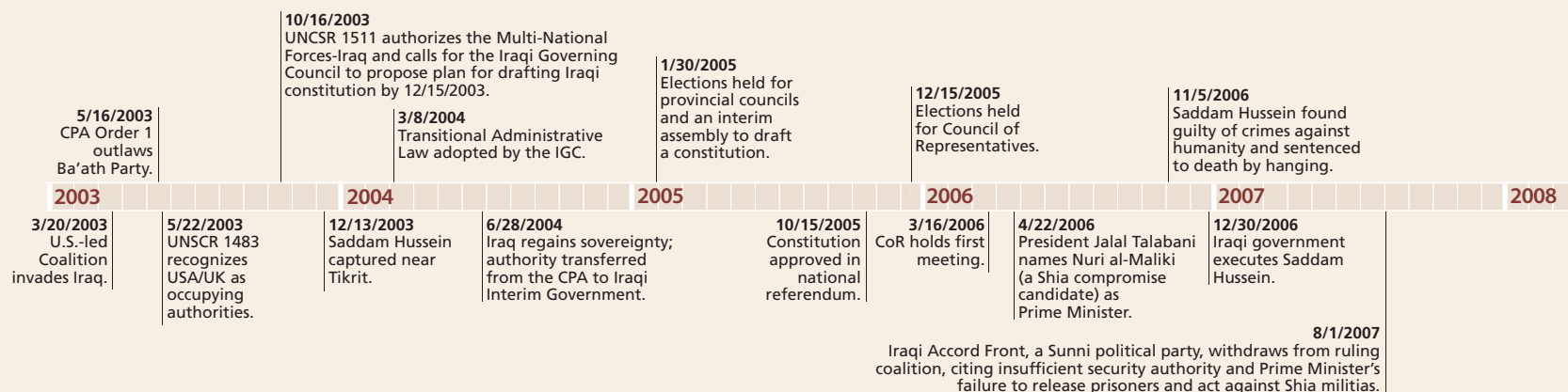
The Transitional Administrative Law, signed on March 8, 2004, required the Transitional National Assembly, eventually elected on January 30, 2005, to draft a new constitution by August 15, 2005, and put it to a referendum on October 15, 2005.<sup>388</sup>

The U.S. government shaped the development of the new Iraqi constitution and implemented countless projects to support elections in Iraq through USAID's Elections and Political Process Strengthening program. Initially funded by \$156 million from the IRRF, three organizations implemented the program: the National Democratic Institute, the International Republican Institute, and the International Foundation for Electoral Systems.<sup>389</sup>

State's Bureau of Democracy, Human Rights, and Labor awarded 12 grants, collectively worth nearly \$250 million, to two USAID implementing partners (IRI and NDI) to promote democracy-building activities in Iraq. The grants supported efforts such as political training, women's political participation, and election assistance.<sup>390</sup>

The Constitutional Drafting Committee began work on drafting a permanent Iraqi constitution in late June 2005. The United Nations Assistance Mission in Iraq oversaw the process, with Iraqis

FIGURE 5.21  
Governance Timeline



*In the first seven years after the downfall of Saddam Hussein, Iraq held six successful major electoral events.*





A woman in Kirkuk shows that she just voted in the October 15, 2005, referendum on the new constitution. (USAID photo)

accomplishing the actual drafting in what became a very politically charged atmosphere.<sup>391</sup>

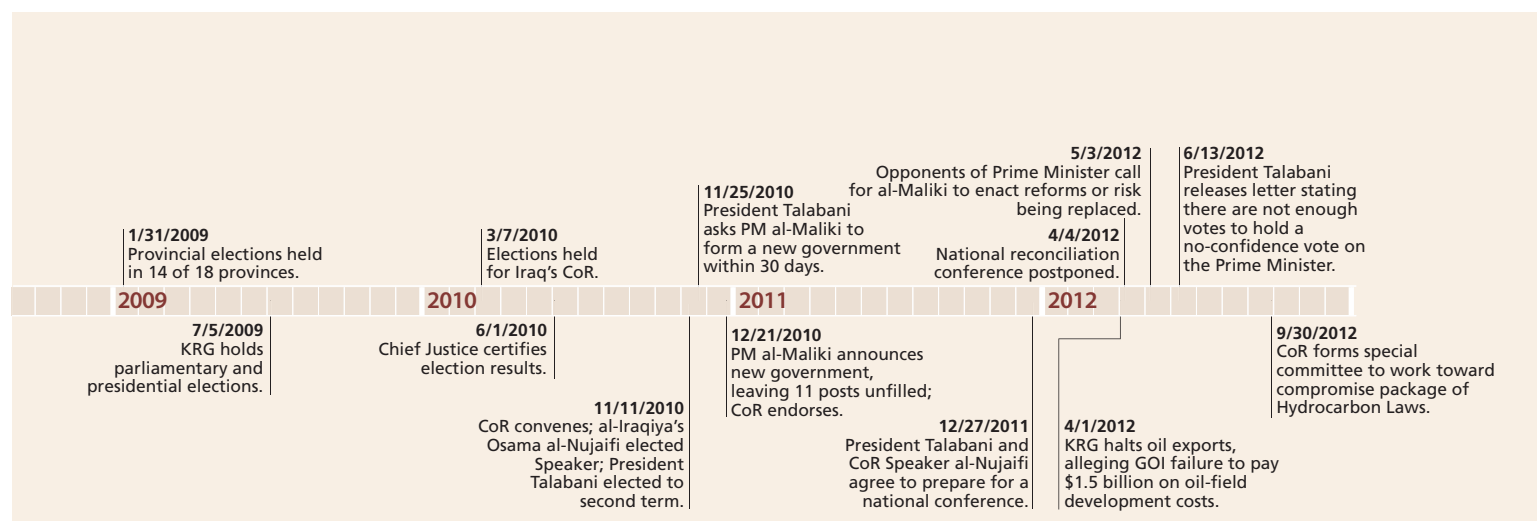
NDI and IRI contributed as well through a \$20.5 million program that provided international constitutional experts who shared their expertise, facilitated public input, and provided administrative support. The drafting committee ostensibly completed its work by August 15, but changes to the document continued right up to the eve of its approval in October.<sup>392</sup>

Influential Sunni Arab political groups and others, including the Shia Grand Ayatollah Ali al-Sistani, criticized the process as well as the document's substance. Notwithstanding resistance, especially from Sunnis, Iraqis approved the constitution in a relatively peaceful referendum on October 15, 2005. Notably, the new law of the land accorded the Kurdistan Region substantial autonomy, but left these critical issues for later resolution.<sup>393</sup>

- clarification of the relationships between and among the local, provincial, and federal governments, especially regarding the governance authority of local councils<sup>394</sup>
- the distribution of territory and mineral interests in Kirkuk and surrounding areas<sup>395</sup>

Political imbroglios aside, the peaceable execution of multiple democratic elections in Iraq is a reconstruction success story. USAID provided substantial support to the Independent High Electoral Commission's administration of six electoral events: the referendum on the draft constitution, two parliamentary elections, two provincial elections, and the election of the KRG President (see Figure 5.21).<sup>396</sup>

Financial support came primarily from USAID's Electoral Technical Assistance Program, which provided about \$103 million.<sup>397</sup> The



program included administrative guidance, professional mentoring, and technical training for the IHEC.<sup>398</sup>

Election support is expensive. In preparation for the January 2010 parliamentary election, USAID expended \$42 million in developing information and communication systems to tally election results and update voter registration records.<sup>399</sup> In September 2011, USAID extended its agreement with IHEC to continue the Electoral Training Assistance Program through 2014.<sup>400</sup>

In March 2012, USAID's Inspector General conducted a review of the Electoral Technical Assistance Program, finding it impossible to measure the effects of program's activities. For example, USAID failed to use a performance management plan to define elections assistance delivery and measure what it achieved. UNAMI also provided significant support to IHEC, and thus, in the absence of a performance management plan, USAID's Inspector General could not determine which organization achieved which results.<sup>401</sup>

Similarly, a SIGIR audit found that DRL could not measure the impact of the grants it awarded for democracy-building activities, concluding that only 41% of grant funds were spent on direct program activities, with the remaining spent on security and overhead costs.<sup>402</sup>

### Community Development

The United States implemented a series of programs aimed at fostering what the CPA called a "vibrant civil society." One of the largest was USAID's three-phase, \$740 million Community Action Program, which lasted from May 2003 to September 2012.<sup>403</sup> The program fostered civic development, improved government responsiveness to local needs, and assisted civilian war victims.<sup>404</sup> In late 2012, USAID announced a successor to the CAP program, a three-year, \$75 million initiative called Broadening Participation through Civil Society. This program focuses on strengthening Iraq's continuing growth as a parliamentary democracy by encouraging greater citizen-participation in Iraq's social and political development.<sup>405</sup>

It is difficult to measure accurately the effects of the USAID programs established to encourage the spread of democratic principles in Iraq. These efforts trained tens of thousands of civil servants on improving government responsiveness and sought to open the eyes of

countless citizens to the benefits of living in a free democracy. But no meaningful metrics were established to assess the results of these activities. Perhaps the problem lies in the nature of the program itself: how do you empirically capture the effects of civics training on the ability of a person to be a better citizen?<sup>406</sup>

### Capacity Development

From May 2003 through September 2012, the U.S. government obligated \$2.45 billion and expended \$2.27 billion to increase Iraq's capacity for governance through targeted capacity-development programs and projects executed at the national, regional, and local levels. The ESF served as the primary funding source for these efforts, contributing more than three-fourths of the money.<sup>407</sup>

Nearly one-fourth of all funding for capacity development (about \$550 million) was obligated in the fourth quarter of 2007. Total obligations had been relatively flat during the preceding year, but, in May 2007, the Congress required that the GOI demonstrate satisfactory progress toward 18 benchmarks before releasing any new ESF funding. In July 2007, the President signed a waiver to this requirement for \$642.5 million, which was then released for new obligations.<sup>408</sup> This coincided with the mid-2007 surge of civilian personnel deployed to stem sectarian violence by focusing on neighborhood reconstruction (through the PRT program).<sup>409</sup>

### National Programs

Two programs established in 2006 focused on national capacity development in Iraq: the Department of State's \$45 million Ministerial Capacity Development program and USAID's \$339.4 million National Capacity Development program, or *Tatweer* (Arabic for "development").<sup>410</sup>

The MCD effort focused on strengthening the central government by increasing ministry effectiveness and improving GOI budget execution.<sup>411</sup> Despite these efforts, budget execution remained a persistent problem. For example, while the GOI executed the majority of its operational budget in 2010, the rate of execution for capital budgets remained low, with 13 ministries spending less than half their capital budgets and three ministries with expenditure rates below 20%.<sup>412</sup>

*Tatweer* sought to create a national training center to develop the Iraqi Civil Service. USAID abandoned this goal after U.S. officials determined that the GOI lacked the capacity to manage it. *Tatweer* then shifted focus to training 76,000 GOI personnel on the basic skills of administrative governance. In 2008, the program's emphasis moved to a "train the trainers" approach, seeking to inculcate a culture of professionalism and continual education within the GOI's public sector. According to a USAID-sponsored evaluation of *Tatweer*, "soft impacts"—such as organizational culture changes, the embrace of modern techniques, and systemic improvements—were not achieved because top-level managers in ministries failed to implement reforms.<sup>413</sup>

In June 2011, USAID created a four-year, \$156.7 million Administrative Reform Project, called *Tarabot*, or "linkages" in Arabic, as a follow-on to *Tatweer*. *Tarabot* sought to strengthen federal, provincial, and local governments' capacities to manage public-policy decision making and government resources.<sup>414</sup>

### **Local and Provincial Programs**

USAID's single-largest development initiative in Iraq was the Local Governance Program. Begun in April 2003 and lasting through June 2011, this \$807 million effort aimed to improve the management and administration of local, municipal, and provincial governments.<sup>415</sup>

The LGP executed projects in communications, conflict resolution, leadership skills, and political analysis, among other things.<sup>416</sup> Evaluations executed toward the end of the effort raised concerns about the program's longer-term effects because of the failure by Iraq's central government to devolve power to the provincial and local governments. To remedy this weakness, in late 2011, USAID began a five-year, \$117 million Governance Strengthening Project to follow upon the work of the LGP, but aimed chiefly at bolstering the decentralization of power in Iraq.<sup>417</sup>

The Provincial Reconstruction Team program was perhaps the most innovative and, where it worked, the most integrated capacity-building initiative in Iraq. Among other things, PRTs helped local and provincial government officials identify rebuilding needs and then tried to meet some of them with available resources. The

PRTs supported capacity-building efforts targeted at city and provincial governments to improve their ability to deliver essential services to the citizenry. Further, they worked with Iraqi Provincial Reconstruction Development Councils, which were groups of local officials and community leaders in the 15 southern provinces empowered to make decisions about local reconstruction priorities. The PRDCs served as a training ground in program and project management for local government officials. They were supposed to ensure the sustainment of U.S.-funded projects—a calling that produced mixed results.<sup>418</sup>

As of September 2012, the United States had obligated about \$618 million and expended about \$590 million for PRDC projects that supported programs in the water and sanitation, electricity, education, and other reconstruction sectors.<sup>419</sup> The two largest PRDC projects were the Erbil Emergency Hospital (nearly \$13 million) in northern Iraq and the Missan Surgical Hospital (more than \$16 million) in southern Iraq. The Erbil Emergency Hospital was completed in less than two years—fast by reconstruction program standards.<sup>420</sup> But the Missan Surgical Hospital, a project started in September 2007 with a required completion date of September 2009, remained unfinished as of October 2012. As of September 2012, the State Department still managed \$42.7 million in PRDC projects.<sup>421</sup>

The PRTs chiefly used money from the State Department's Quick Response Fund to help provincial governments accomplish short-term projects. State created the QRF in August 2007 to provide a flexible means for supporting short-term, high-impact projects.<sup>422</sup> It modeled the program on the CERP, hoping that it would prove a "flexible tool to quickly execute programs that will improve the local community." State shared program implementation with USAID.<sup>423</sup>

PRTs provided QRF funds through grants, microgrants, direct procurements, and micropurchase agreements to and with local government officials and community-based groups, such as nonprofit organizations, business and professional associations, charities, and educational institutions. SIGIR audits of the QRF found serious recordkeeping deficiencies with State's project management processes, including indications of potential fraud, but USAID's implementation met standards.<sup>424</sup> As of September 2012, the ESF had funded \$287 million in QRF projects.<sup>425</sup>



## Public Services

After the 2003 invasion, the Iraqi government had difficulty providing basic public services to its citizens.<sup>426</sup> Schools and hospitals were destroyed, damaged, or closed because they lacked essential supplies; uncollected trash piled up in the streets; sewage spewed in many places.<sup>427</sup>

As of September 2012, United States had obligated \$3.06 billion and expended \$2.55 billion to help the GOI rebuild its capacity to provide public services. More than three-quarters of the funding came from the IRRF and CERP, with the ESF providing the balance. At just over \$1 billion, health care received the largest portion of the funding (33%), followed by civic cleanup and infrastructure repair at \$977 million (32%), education at \$789 million (26%), and public safety at \$296 million (10%). More than one-third of the total obligations occurred by mid-2005.<sup>428</sup>

*SIGIR Audit 06-026 and PA-08-160*

### Basrah Children's Hospital: Still Patiently Waiting, Patients Still Waiting

The largest individual healthcare construction project was the Basrah Children's Hospital, which USAID awarded to Bechtel in 2004 for \$50 million. The project would eventually cost \$165 million. The hospital was envisioned as a 94-bed, "state-of-the-art" pediatric oncology hospital that would serve southern Iraq. During the planning stages, USAID and Project HOPE signed a memorandum of understanding, providing that the U.S. government would be responsible for construction of the hospital, while Project HOPE would be responsible for installing advanced medical equipment and training medical staff.

Work moved slowly. Deteriorating security, bad site conditions, and poor contractor performance pushed up costs and pushed out the completion date. By 2008, the contractor had been terminated, and new funding poured in. Construction was completed in 2010, and the

hospital opened for limited treatment in October of that year. But in late 2012, USACE still had several ongoing ESF-funded projects for equipment procurement, installation, and training.



*U.S. soldiers look over the grounds of the Basrah Children's Hospital under construction in May 2009. (U.S. Army photo)*

## Health

In the 1970s, Iraq had one of the better healthcare systems in the Middle East, with access available to 97% of urban and 79% of rural populations. Over the next 30 years, a combination of wars, sanctions, and reckless neglect by Saddam's regime caused the Iraqi health system to fall into a grave state of dysfunction.<sup>429</sup> In 2003, USAID described Iraq's health care as very poor, reaching only part of the population, and "particularly weak" with respect to maternal and child care and health information systems.<sup>430</sup>

USAID's broad goal for postwar Iraq was to ensure that all Iraqis received basic health care. To accomplish this, it set milestones with expected dates of completion, though they tended, in retrospect, to be a bit optimistic. For example, USAID planned on basic health services to be available to 25% of the entire population and 50% of mothers and children within 60 days of the invasion.<sup>431</sup> The CPA's plans superseded USAID's. They included restoring basic health services to 95%–100% of prewar levels by October 2003 and enhancing primary care, prevention, and wellness services by January 2004.<sup>432</sup>

From May 2003 to September 2012, the U.S. government obligated about \$1 billion and expended \$934 million for health projects, both construction and non-construction.<sup>433</sup> Brick-and-mortar projects included the construction or rehabilitation of hospitals and clinics throughout Iraq. The \$362 million Primary Healthcare Center (PHC) program, the single-largest IRRF-funded activity within the health sector, aimed to build 150 clinics. A SIGIR review found the program gravely deficient in execution.<sup>434</sup> Table 5.9 lists some of the largest healthcare construction projects (including projects funded under the PRDC program discussed in the Capacity Development subsection above).

U.S.-funded non-construction projects provided medical supplies and equipment for newly constructed or rehabilitated hospitals and clinics and training for medical personnel. USACE funded two projects worth more than \$53 million to supply medical equipment to the PHCs, including x-ray machines and dental chairs; but this equipment was largely never used, as revealed in SIGIR reporting.<sup>435</sup>

From late 2009 through 2010, USAID's \$5 million Health Promotion Program in Iraq helped the Ministry of Health design,

implement, and evaluate programs to improve public awareness of health issues, such as malnutrition.<sup>436</sup> In 2011, USAID started the four-year, \$72.9 million Primary Health Care Project in Iraq, seeking to strengthen the delivery of primary healthcare services across the country.<sup>437</sup>

State and USAID reported that U.S.-funded projects resulted in the vaccination of millions of children against measles, mumps, and rubella. In addition, by 2011, the national infant-mortality rate had decreased by 68% since 2003.<sup>438</sup>

### **Civic Cleanup and Infrastructure Repairs**

Military commanders used CERP funds to promote quick-impact, high-visibility projects aimed at reducing the high level of unemployment among young, non-skilled Iraqis and improving local perceptions of the Coalition. As of September 2012, the military had obligated \$317.8 million and expended \$291.6 million on civic cleanup and infrastructure repair projects throughout Iraq. Of the obligated amount, \$204.1 million (64%) funded cleanup projects, while \$113.6 million (36%) supported infrastructure repairs.<sup>439</sup>

In May 2006, as the security situation deteriorated, USAID collaborated with the U.S. military to establish a program to complement counterinsurgency operations in strategic cities. USAID initially used \$30 million in IRRF funding for this “focused stabilization” effort.<sup>440</sup> Soon \$619 million in ESF funding followed, and this effort evolved into what became the four-year Community

*SIGIR PA-09-178*

### **Safe at Home in Erbil: A Perfect Project**

The \$3.7 million Erbil Orphanage and Senior Citizen Assisted Living Center project involved the demolition of an existing orphanage, which people in Erbil said was “like a prison,” and the construction of a new first-of-its-kind complex to provide a safe and clean living environment for 345 destitute orphans and 60 senior citizens. The contractor engaged local officials and incorporated their suggestions into the facility’s design, which included ramps, motion-activated automatic doors, and other features to accommodate children and seniors with physical limitations.

The contractor also included, at his own expense, a geotechnical study of the soil to determine the allowable soil-bearing capacity. USACE provided diligent on-site quality-assurance support, including identifying and reporting construction deficiencies and following up with the contractor to ensure corrective actions had been taken.

SIGIR visited the facility in July 2009, five months after it had been turned over to the KRG, and found it fully functioning and in immaculate condition. The contractor’s quality of work—including spiral staircases, decorative ceramic tiles, and floor-to-ceiling glass exterior wall—was the best SIGIR ever

observed in Iraq.

The KRG’s Ministry of Social Affairs contributed to the success of this project by providing commercial-grade furniture for the living areas and appliances for the kitchen. The facility’s exterior included a children’s playground and swimming pool. The contractor, ministry, and USACE personnel agreed that the safe security environment significantly contributed to the overall success of this project.



*The quality of work at the U.S.-funded project in Erbil was the best SIGIR ever observed.*

TABLE 5.9

#### **Major U.S.-funded Healthcare Construction Projects**

\$ Millions

Project Name	Province	Contractor Name	Contract Award Date	Completion Date		Fund	U.S. Cost
				Original	Actual		
Primary Health Care Centers	Multiple	Parsons Delaware, Inc., Others	3/25/2004	12/26/2005	10/1/2008	IRRF 2	361.5
Basrah Children's Hospital	Basrah	Bechtel National, Inc.	8/3/2004	12/31/2005	10/21/2010	IRRF 2	103.9
Missan Surgical Hospital	Missan	Eastern Deffaf Al-Nahraen	9/20/2007	5/19/2009	N/A	ESF	16.0
Erbil Emergency Hospital	Erbil	Tigris Engineering Consultancy Electric	7/28/2008	12/4/2009	5/31/2010	ESF	12.9
Ba'quba General Hospital	Diyala	Liqaa al-Mustakbal Co.	11/24/2007	12/2/2008	12/26/2010	ESF	8.0

Stabilization Program. The program supported the U.S. military's efforts to roll back the insurgency by creating initiatives that reduced incentives for violence by at-risk youth.<sup>441</sup>

This "non-lethal counterinsurgency program" sought to stem the accelerating violence in Iraq by generating employment, rehabilitating infrastructure, and stimulating local businesses.<sup>442</sup> According to USAID, the CSP operated in 17 "insurgency-affected" cities, directly employed more than 47,000 individuals on a long-term basis, provided vocational training to more than 41,000, helped place more than 9,900 vocational training graduates into apprenticeship programs, approved a total of \$77.4 million in grants to more than 10,250 business owners, and enrolled nearly 339,000 Iraqi youth in soccer, arts, and life-skills programs.<sup>443</sup>

*SIGIR Audit 09-015, PA-06-042-046, PA-08-133, PA-08-134, PA-08-157, PA-08-158*

### Primary Healthcare Centers: If You Build It (or Not), We Will Pay You

The CPA awarded a \$243 million task order in 2004 to construct and equip 150 primary healthcare centers across Iraq by December 2005. In March 2006, citing little progress, the US government terminated the task order "for convenience" and reduced the number of PHCs to 142. SIGIR reviewed the PHC program, concluding that \$186 million had been spent with only six PHCs accepted by USACE as complete.

After contract termination, USACE was responsible for assessing the condition of the partially constructed PHCs, estimating costs and completion dates, and awarding firm-fixed-price contracts to Iraqi contractors to complete them. These additional contracts added \$57 million to the PHC program.

In September 2006, USACE predicted half of the PHCs would be completed by the end of 2006 and the remainder by early 2007. Actual completion dates slipped significantly. Nine PHCs were not completed due to security, including one partially constructed PHC that was bombed twice within two months.

Poor performance by follow-on contractors, along with weak U.S. government program

oversight, led to the contractors' termination, a drop in the number of PHCs to be delivered to 133, and a \$102 million increase in costs. Tens of millions more were spent, but SIGIR's reviews indicated that the construction, installation of equipment, and necessary training were not adequately completed for a significant number of PHCs. Operational and sustainability issues persisted, which required an additional \$16.5 million to correct deficiencies at 17 PHCs long after program closure.



*SIGIR inspects a poorly constructed block wall, one of many deficiencies that SIGIR identified at PHCs throughout the country.*

Two reviews of the CSP revealed mixed results. The USAID Inspector General was unable to establish a causal relationship between CSP initiatives and a reduction in violence in the strategic cities where it operated. In addition, the USAID OIG could not substantiate CSP's claims regarding employment generated by the program. More disturbingly, the inspector general found evidence that potentially millions of dollars in CSP funds had been diverted to insurgents.<sup>444</sup>

### Education

Until the 1980s, Iraq's education system was among the best in the Middle East, producing high literacy rates. But Saddam's despotism, a debilitating war, and consequent restrictive sanctions sunk the system. By 2003, school attendance had dropped significantly, with literacy among girls at 45% and 80% of the 30,000 primary schools in poor condition. A UN and World Bank report said restoring the Iraqi education system to 1980s levels would take \$4.8 billion.<sup>445</sup>

Iraq's "greatest challenges in education are related to improving the curriculum, materials and supplies, and quality of teaching," said USAID's *Vision for Post-Conflict Iraq*. Following upon this, the CPA established goals to revise textbooks and rehabilitate 1,000 schools by October 2003, initiate curriculum reform, and ensure the availability of school supplies by January 2004.<sup>446</sup>

USAID awarded the largest IRRF-funded education project, a \$48.3 million contract to provide supply kits to primary school children and teachers throughout Iraq.<sup>447</sup> The project reportedly procured and delivered more than 500,000 school kits to Iraqi school children in over 2,200 schools by December 2005.<sup>448</sup> Additional USAID contracts rehabilitated schools across the country; by early 2006, USAID had supported the construction or rehabilitation of 2,943 schools.<sup>449</sup>

From 2004 through 2010, USF-I reported the completion of 3,493 CERP-funded projects in the education sector.<sup>450</sup> CERP-funded school projects, primarily costing less than \$500,000, supported such things as refurbishments, installing new air conditioning units, and restoring utilities.<sup>451</sup>

By September 2010, USACE reported that it had completed more than 1,100 education projects.<sup>452</sup> The largest project was the \$5.4 million



Baghdad Academy of Health and Science, which provided a new training facility for healthcare providers.<sup>453</sup>

U.S. government assistance in the education sector transitioned in 2009 from construction and rehabilitation to capacity development.<sup>454</sup> State and USAID funded workshops to train Iraqi professionals in the field of student advising and career development, provided books, equipment, and distance-learning technology, and expanded the Fulbright Visiting Scholar Program for Iraq.<sup>455</sup>

By 2011, Iraq's primary school enrollment had increased 27% since 2002, more than 33,000 teachers had been trained, and 8.6 million new textbooks had been purchased to modernize the curriculum.<sup>456</sup>

As of September 2012, the U.S. government had obligated \$788.9 million and expended \$379.4 million to rebuild Iraq's school infrastructure and curriculum. Of this amount, the CERP accounted for more than three-fourths of the expenditures, with the remainder coming from the IRRF.<sup>457</sup>

Despite this notable investment, the Education Committee of Iraq's Council of Representatives estimated in 2011 that 5 million Iraqis were illiterate. The Minister of Education called this "appalling" and attributed it to overcrowding of classrooms and the poor quality of teachers.<sup>458</sup> At the end of September 2012, USAID launched a new five-year \$89.1 million Primary Education Strengthening Project, called *Ajyal* (Arabic for "generations"), with the goal of strengthening the GOI's ability to deliver quality primary education through improved teacher skills.<sup>459</sup>

## Humanitarian Relief

Prewar planning efforts centered on avoiding humanitarian disasters and prioritizing food relief in case of shortages following military operations. With decades of relevant experience, USAID was tapped to develop programs to prevent or minimize acts of reprisal and maximize high-visibility projects that could earn the goodwill of the Iraqi people.<sup>460</sup>

Though the 2003 invasion did not produce the expected humanitarian crises, the ensuing chaos brought by criminal conduct and the insurgency did cause the destruction of numerous facilities and the displacement of as many as 2 million Iraqis.<sup>461</sup>

In 2003, USAID established an IRRF-funded program to help Iraqi civilians injured by Coalition Forces. Carried out as part of USAID's Community Action Program, this program (later renamed the Marla Ruzicka Iraqi War Victims Fund in May 2005) provided wheelchairs and prosthetics to those with disabilities and rehabilitated local schools and hospitals.<sup>462</sup> By September 2012, the fund had expended nearly \$30 million, which USAID reported had assisted millions of Iraqi civilians. Marla Fund activities generated goodwill from local communities; however, USAID warned that Iraq may be ill-prepared to sustain these activities once U.S. funding ceased.<sup>463</sup>

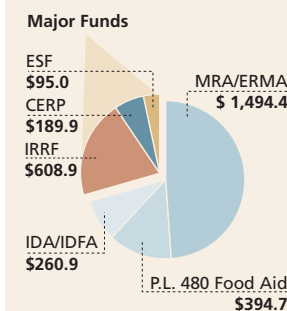
As of September 2012, the U.S. government had obligated \$893.8 million and expended \$840.8 million from three major U.S. reconstruction funding sources—the IRRF, CERP, and ESF—on projects and programs to support humanitarian relief. The IRRF provided \$608.9 million for this sector, while the CERP contributed \$189.9 million, and the ESF provided \$95 million.<sup>464</sup>

However, these three major funds accounted for less than one-third of the total U.S. obligations for humanitarian relief. About \$2.15 billion came from the Migration and Refugee Assistance, Emergency Refugee & Migration Assistance, International Disaster Assistance, and P.L. 480 funds (see Figure 5.22).<sup>465</sup>

The State Department's Bureau of Population, Refugees, and Migration developed humanitarian programs for Iraq utilizing its international and non-governmental partners to assist the needs of displaced Iraqis and facilitate their return and reintegration to Iraq.<sup>466</sup> As of September 2012, PRM had obligated \$1.6 billion to support Iraqi refugees and internally displaced persons. Since 2006, more than 936,000 IDPs and refugees had returned to their place of origin.<sup>467</sup>

USAID's Office of Foreign Disaster Assistance contributed more than \$450 million toward humanitarian assistance programs in Iraq. Of this amount, OFDA expended \$261 million to distribute essential emergency relief supplies, provide emergency shelter, improve access to water and sanitation services, and support livelihood and economic recovery opportunities.<sup>468</sup> USAID obligated and expended \$395 million in funding from the "Food for Peace" program, combating hunger and malnutrition through the donation of U.S. agricultural commodities.<sup>469</sup>

FIGURE 5.22  
**Humanitarian Relief Obligations, by Fund Type, as of 9/30/2012**  
\$ Millions



## Economy

From 1991 to 1999, Iraq's annual gross domestic product averaged under \$20 billion—roughly one-quarter of the 1990 peak level of nearly \$75 billion. Crude oil production, which had reached a record 3.5 million barrels per day in July 1990, was about 1 MBPD below that level on the eve of the 2003 invasion. Iraq's banks, isolated by sanctions for a decade, no longer functioned as traditional lending institutions and had become cash troughs for Saddam and his cronies. More than half of all working-age Iraqis were either unemployed or under-employed.<sup>470</sup>

The events of March and April 2003 aggravated these conditions. When post-invasion looting ended, just two of the 170 Rafidain Bank branches remained open for business, the Central Bank vault had been largely cleaned out, and most of Iraq's 190-odd state-owned enterprises, the heart of the country's non-oil industrial sector that provided employment and income for 12% of Iraq's workforce, had shut down. Iraq's economy was on its knees.<sup>471</sup>

The CPA set a broad initial goal for rebuilding Iraq's non-oil economy: create conditions for growth.<sup>472</sup> But the CPA faced a significant structural obstacle: Iraq had a long-standing command economy, driven by an entirely state-owned oil and gas sector. Converting this centrally controlled system into one anchored by free and open markets was too ambitious for the CPA's time-limited missions. Instead, it sought to “set the Iraqi economy on the path for sustained growth and establish strong momentum toward an open economy.”<sup>473</sup>

The CPA set these three initial tasks to put free-market foundations in place.<sup>474</sup>

- **Build financial market structures**—This included legislation to reform the Central Bank of Iraq as an independent body, arming it with powers to oversee the nation's commercial banking system and conduct monetary policy free from political interference. Market reform included national budget reform, the issuing of new bank notes, and a restructuring of the commercial banking system.
- **Promote private business**—This entailed streamlining bureaucratic codes and regulations, reducing restrictions on capital investment,

and generating credit programs to provide small and medium-sized enterprises access to capital.

- **Determine the future of the state-owned enterprises**—This required conducting a limited privatization or leasing of competitive SOEs, then assessing the potential for selling the remaining large ones to private-sector buyers.

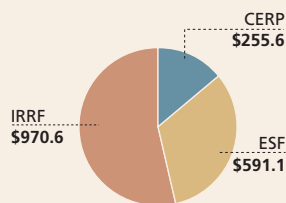
The CPA pursued several other policy initiatives to reform the economy, including plans to phase out a program that provided a basket of subsidized food items for every Iraqi, to build a new social safety net, and to design a national trust fund fed by a percentage of the country's oil revenues that would flow to Iraqi nationals—either directly as cash payments or indirectly via government programs. A planned trade stimulus initiative would end tariffs, create trade credits, and liberalize Iraq's transportation and telecom sectors consistent with World Trade Organization conditions.<sup>475</sup>

The United Nations and the World Bank estimated that Iraq's SOEs would require \$356 million in technical assistance and capacity-building support from 2004 through 2007 to become viable entities. They further concluded \$81 million in technical assistance and capital investments would be required to restore the financial sector, while \$340 million would be required to boost Iraq's overall investment climate.<sup>476</sup>

The country's long-neglected agricultural sector, which employed 20% of the country's workforce but contributed only 8% of the GDP, would need more than \$2 billion to upgrade irrigation systems and another \$1 billion for fertilizers, seed, and other farm-level inputs.<sup>477</sup>

From 2003 through September 2012, the United States obligated \$1.82 billion to revive the country's non-oil economy—less than 4% of the \$49.37 billion in total obligations from the five major reconstruction funds. Just over half of this amount came from the IRRF, slightly less than a third came from the ESF, and the remaining 14% came from the CERP (see Figure 5.23). The United States divided the funds between supporting the goals of improving economic governance and fostering private-sector development. The United States obligated half of the \$1.82 billion by the end of 2005, with more than 90% obligated by the end of 2010 (see Figure 5.24).<sup>478</sup>

FIGURE 5.23  
**Economy:  
Cumulative Obligations,  
by Fund, as of 9/30/2012**  
\$ Millions



## Private-sector Development

### Financial Sector

In the late spring and summer of 2003, the CPA moved to reform Iraq's banking sector. It suspended Saddam-era banking laws that had given the Ministry of Finance the exclusive right to authorize loans to government ministries. The Central Bank of Iraq was re-established as an independent body and given control over monetary and credit policy. It also took over responsibilities for supervising commercial banks.<sup>479</sup>

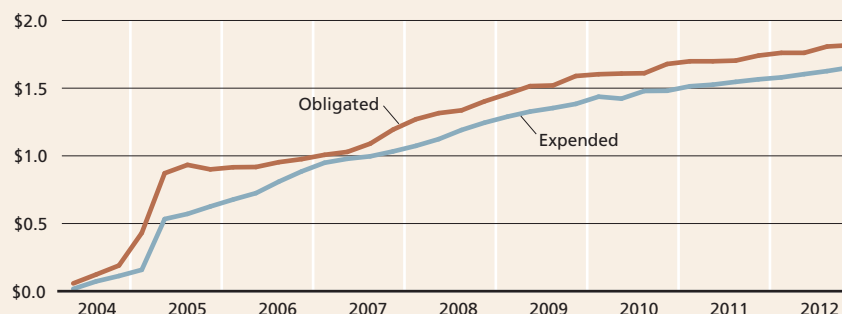
With Iraq's banking system effectively incapable of issuing commercial credit, the CPA established a new bank—the Trade Bank of Iraq—authorizing an initial capitalization of \$100 million to finance business dealings, including imports and exports.<sup>480</sup>

In its first seven years, the TBI issued letters of credit valued at more than \$45 billion. It financed important infrastructure projects and led banking sector modernization efforts.<sup>481</sup> Although the TBI was considered a success story, in June 2011, Prime Minister al-Maliki accused TBI chairman Hussein al-Uzri of “financial violations” and announced an investigation into the bank's actions. Al-Uzri fled the country, and al-Maliki replaced him with an executive from the state-owned Rafidain Bank, Hamida al-Jaf.<sup>482</sup>

Several U.S. reconstruction programs subsequently were implemented to strengthen the CPA's reforms. For example, the five-year \$53 million, ESF-funded Financial Development Program, which USAID began in July 2010, drew on the knowledge of experts from the CBI, private-sector banks, and university business schools to strengthen private-sector bank capacity, improve the quality and availability of finance and business education, and establish new institutions such as a credit bureau, a bank training institute, and a retail payments system.<sup>483</sup>

Under the leadership of former United Nations economist Sinan al-Shabibi, the CBI's monetary policies created the stability required for economic growth.<sup>484</sup> The CBI failed, however, to implement effective oversight policies to control the commercial banking sector. GOI anticorruption officials believed that banking industry involvement in money laundering had become widespread. A 2012 audit conducted by the Board of Supreme Audit confirmed this, estimating that as much as 80% of all money transferred out of Iraq involved money-laundered funds.<sup>485</sup>

FIGURE 5.24  
Economy: Cumulative Obligations and Expenditures,  
FY 2004–FY 2012  
\$ Billions



*Half of the funds to rebuild Iraq's non-oil economy were obligated by the end of 2005.*

The findings triggered a warrant for Governor al-Shabibi's arrest while he was out of the country. He had yet to return by early 2013. Meanwhile, the CBI's independence diminished following apparently successful efforts to transfer control over the CBI from the Council of Representatives to the Council of Ministers.<sup>486</sup>

Transforming Iraq's antiquated state-dominated banking sector proved difficult. As of mid-2012, Iraq's private banks continued to account for less than 15% of Iraq's banking activity. A 2011 survey conducted by USAID indicated that only 1.4% of all Iraqis had accounts in private banks. Private banks also remained cautious, preferring to hoard cash rather than issue new loans.<sup>487</sup> For a comparison cash-to-deposit ratios of Iraq private banks and their international counterparts, see Table 5.10.

The two large state-owned Rasheed and Rafidain banks remained

TABLE 5.10  
International and Iraqi Bank Comparison  
of Cash-to-deposit Ratios, 2009

Private Bank	Cash/Deposits
Standard Chartered	6.2%
JPMorgan Chase	2.7%
Arab Bank, PLC	23.2%
Average of 21 Iraqi Private Banks	84.8%



*The Trade Bank of Iraq led efforts to modernize the banking sector.*



the country's largest financial institutions; both resisted U.S.-led efforts to restructure and reform. As a result, they continued to work inefficiently and carry large debt loads that prevented them from being a significant lending source.<sup>488</sup>

### **State-owned Enterprise Reform**

During the decade of sanctions before the 2003 war, Iraq's State-owned Enterprises met a broad range of industrial and consumer needs for a people cut off from the world around it. Moreover, they employed hundreds of thousands of workers. But damage from the 2003 invasion and the looting that followed left most SOEs idle.<sup>489</sup>

The United States authorized \$100 million in FY 2007 and FY 2008 to revitalize Iraq's SOEs. This money went to the Task Force for Business and Stability Operations, established by the Defense Department in June 2006 to help revitalize Iraq's economy. Between FY 2007 and FY 2010, a total of \$174 million in Iraq Freedom Fund money was appropriated for the TFBSO. The group reported that, as of December 31, 2010, one month prior to its dissolution, TFBSO had obligated less than half (\$85.7 million) of these funds and expended just \$65.1 million for reindustrialization projects.<sup>490</sup>

In early 2012, U.S. Mission Iraq provided a \$1 million grant to support a project that would value the assets of SOEs as an early



In 2009, workers at a state-owned enterprise in Najaf sew garments, including uniforms for the Iraq Army. (TFBSO photo)

step toward possible privatization.<sup>491</sup> As of September 2012, a small number of SOEs had become viable thanks to the input of foreign capital, but they remained the exception. Most SOEs survived only because of substantial GOI subsidies that in 2012 amounted to around 3% of GDP. They functioned much as a welfare program, distributing paychecks to the estimated 600,000 Iraqis on SOE payrolls, many of whom perform no actual work.<sup>492</sup>

### **Promoting Private Business**

The U.S. reconstruction effort supported the growth of Iraq's nascent private business sector in several specific areas, providing:<sup>493</sup>

- direct assistance to would-be entrepreneurs in the form of microgrants, business development services, and training
- targeted reform of an administrative environment that under three decades of Saddam's control had made it deliberately difficult for businesses to function
- support to revive the banking sector as an efficient provider of capital to fuel the growth of private business
- promotion of free trade, including an initiative to prepare Iraq for entry into the WTO (Figure 5.25 shows factors in Iraq affecting international trade.)

The \$140.2 million USAID Private Sector Development Program named *Izdihar*, or "prosperity" in Arabic, ran from 2004 to 2008, supporting the growth of micro, small, and medium enterprises by providing entrepreneurs with operational and capital grants in addition to training and other technical assistance. This program aimed to create a more market-friendly environment for private-sector-led economic growth.<sup>494</sup>

*Izdihar* was followed in 2008 by USAID's Provincial Economic Growth Program called *Tijara*, or "trade" in Arabic, a \$192.5 million effort with similar goals. Both programs included job creation as an important objective, with a component of *Tijara* assistance directed toward developing capacity within small-business development centers to address youth unemployment.<sup>495</sup>

*Izdihar* and *Tijara* produced a national network of 12 microfinance



USAID's *Tijara* program provided microfinance loans to help small shop owners expand business. (USAID photo)

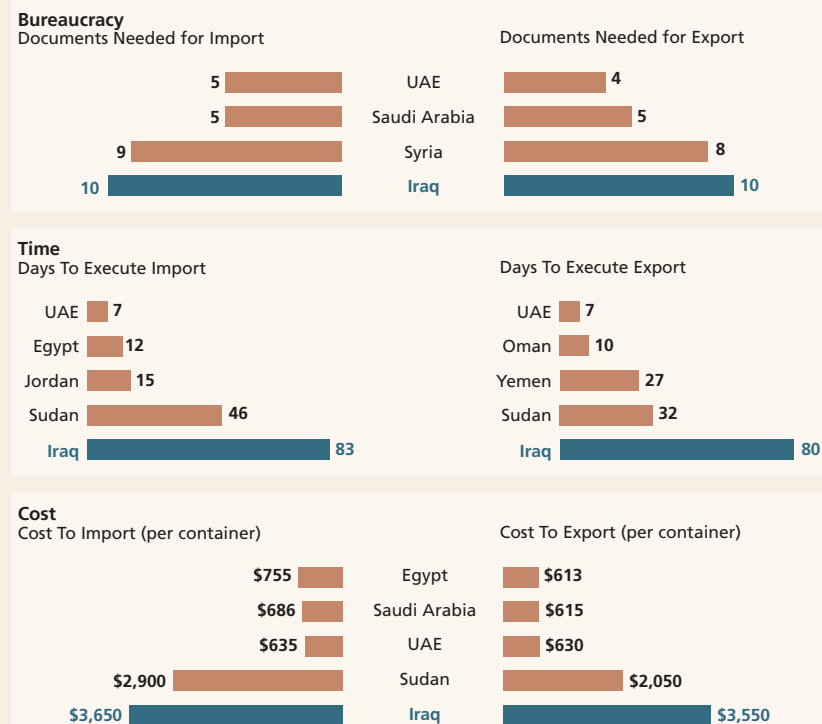
institutions that provided access to affordable capital, especially for those unable to meet the stringent requirements for commercial bank loans. Collectively under the *Tijara* program, USAID reported these institutions dispensed nearly 350,000 loans ranging from \$500 to \$25,000 for business start-ups. The smaller *Izdihar* program issued more than \$17 million in loans and grants and established Iraq's first microfinance institutions.<sup>496</sup>

A USAID evaluation of *Tijara* praised the program's efforts to assist small-business development, singling out projects directed at youth development as especially effective. However, it concluded that results on a second program goal—to integrate Iraq “into the global economy”—were “less positive.” Factors contributing to poor outcomes, included sclerotic customs procedures and a lack of interest on the part of the GOI's Ministry of Trade.<sup>497</sup>

Programs to reduce the level of bureaucracy and promote trade had marginal results. The World Bank's 2013 global ranking of 185 countries according to their ease of doing business placed Iraq 165th overall (see Figure 5.26). It was 177th in ease of starting a

FIGURE 5.25

### Factors Affecting International Trade in Iraq

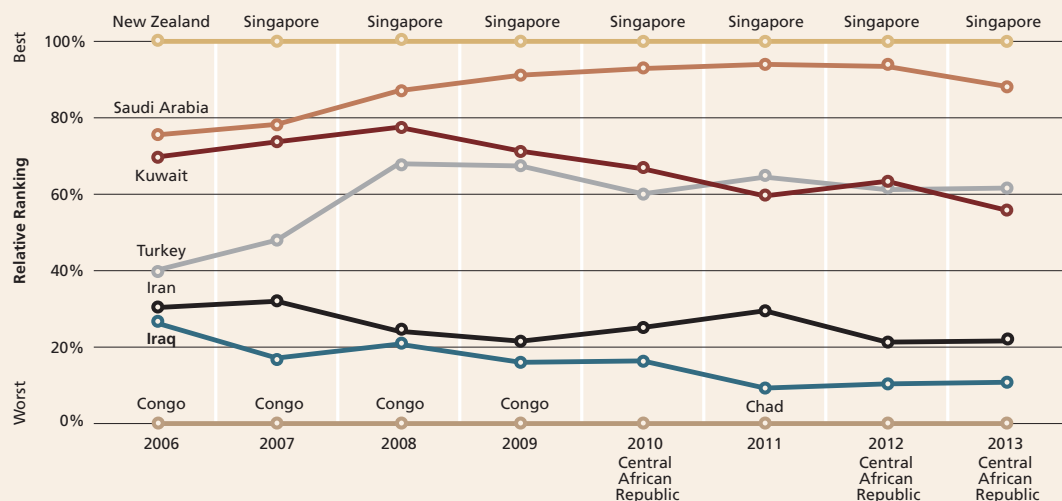


business. Iraq's placement constituted the second and third worst rankings respectively among all Middle East and North Africa nations. Efforts to promote free trade produced similarly poor results, with Iraq finishing last among Arab World nations in six separate categories, according to the World Bank study *Doing Business in the Arab World 2012*.<sup>498</sup>

### Agriculture

The first U.S. reconstruction contract to boost Iraq's farming sector supported a three-year \$101 million Agricultural Reconstruction and Development Program. USAID awarded it in October 2003 to identify where resources should be used and to build capacity in the sector.<sup>499</sup>

FIGURE 5.26  
World Bank “Ease of Doing Business” Rankings, Iraq vs. Selected Countries, 2006–2013



A five-year follow-on agribusiness program, providing nearly \$180 million and known as *Inma*, or “growth” in Arabic, began in mid-2007 and ended in late 2012. Its program goals included boosting productivity to enable Iraq to become more food self-sufficient and lowering production and marketing costs. During 2006–2008, more than \$37 million in CERP money was spent on agricultural renewal programs, including projects to revive Iraq’s date palm trees, formerly renowned for producing the world’s most prized dates.<sup>500</sup>

Efforts to expand and upgrade Iraq’s irrigation system yielded modest results. By late 2012, about 30% of Iraq’s wheat-growing areas remained without irrigation, a reality that required the GOI to import about 3 million tons of wheat to meet demand in 2012. Much of the acreage under irrigation depended on age-old techniques and obsolete equipment.<sup>501</sup>

USAID claimed *Inma* programs led to \$142 million in commodity sales and created nearly 15,000 jobs. But, as the agency launched an \$80 million follow-on program in the fall of 2012, it noted the sector continued to labor under significant inefficiencies, a result of outdated, inefficient, or inappropriate policies. For example, without protective



A melon grower loads his crop onto a truck for transport to market following the 2011 harvest. (USAID photo)

tariffs, domestic farm producers continued to be swamped by cheaper and higher-quality imports, a development that weakened the agricultural sector. As a result, in 2012, 80% of Iraq’s food needs were met by imports.<sup>502</sup>

A May 2010 USAID evaluation concluded *Inma* fell short of its full potential due to several shortcomings, including an overly complex, top-down management structure and an overly academic approach to activities that were developed in a “self-reflective vacuum” rather than in response to needs on the ground.<sup>503</sup>

## Economic Governance

### *Institutional and Regulatory Reform*

The United States obligated \$285.6 million in IRRF and ESF funds to support USAID’s Economic Governance program. Just under \$77 million was obligated for the first phase, which began in July 2003, aiming to stimulate Iraq’s long-dormant international trade, boost employment, and generate a broad-based prosperity.<sup>504</sup>



The CPA approved 38 specific projects under the program but an audit carried out by the USAID OIG near the end of the first year found the program had been slowed by security problems and a “unique” management structure. Among those dampened projects was an ambitious effort to introduce a sophisticated budget control system into the Ministry of Finance.<sup>505</sup>

The \$222.2 million Economic Governance II program ran from September 2004 to September 2009, promoting an open, modern, mixed-market economy by improving economic governance and encouraging private sector growth. It targeted seven specific areas, including tax, fiscal, commercial law and institutional reform.<sup>506</sup>

Economic Governance II embraced 398 specific projects. A USAID OIG audit found the agency’s failure to establish an effective system to monitor the projects weakened overall program management.<sup>507</sup>

### CERP-funded Projects

Between early 2004 and 2010, the U.S. government expended nearly \$110 million from the Commander’s Emergency Response Program on more than 5,700 projects related to the improvement of Iraq’s economy. The expenditure amounted to a small fraction of CERP’s \$3.73 billion expenditures, and only a handful of the projects exceeded \$1 million. The majority of them were under \$10,000, with some budgeted at only a few hundred dollars.<sup>508</sup>

Among the largest projects, \$2.9 million was disbursed in April 2008 for construction of a large farmer’s market located on a major highway in central Iraq. Construction of the market, initially estimated to take two months, required 18 months to complete. More typical was a \$2,500 microgrant issued for a carpentry shop.<sup>509</sup>

### Iraq’s Economy in 2012

Iraq enjoyed a strong economic performance in 2012 because of its prospering oil sector. The country’s GDP grew at 10.2%, nearly double the average among the Middle East and North Africa nations. With core inflation at just over 5% and interest rates at 6% for the third straight year, important fundamentals were in place for further growth. For 2013, the IMF projected Iraq’s GDP would grow at a rate of

*SIGIR Audits 08-001 and 08-007*

### The Iraq Financial Management System: Transparency Intercepted

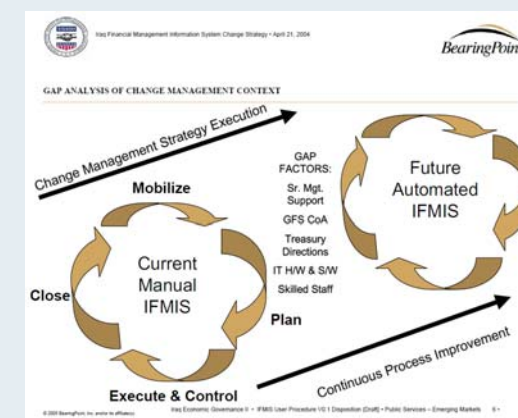
The CPA concluded in 2003 that the GOI’s financial management system provided limited insight into ministerial budgets. This left them vulnerable to fraud, waste, and the misappropriation of funds.

It resolved to develop a high-tech electronic solution—the Iraq Financial Management Information System—and enlisted USAID to manage the project. USAID awarded a contract to develop and implement the IFMIS, with a September 2005 completion date.

Development of the IFMIS was driven by U.S. reconstruction policy decisions, CPA guidance, and contractor work plans, without any attempt to identify ministry requirements. The GOI resisted using a program it never approved and sensed was being forced upon it.

In May 2007, the project was disrupted when one of the contractor’s consultants and four security guards were kidnapped from the Ministry of Finance. The four guards were subsequently killed; the consultant was held hostage until December 2009. One month after the kidnapping, the Embassy suspended the IFMIS program because of security issues and a lack of GOI support. In

2012, after the expenditure of \$32.6 million, the IFMIS remained incomplete and unused. SIGIR learned in early 2012 that another firm was working with the Ministry of Finance to develop a new prototype system that would use much of the IFMIS data.



*The contractor’s May 2005 change-management strategy for transitioning from a manual to an automated FMS.*

14.7%, one of the world’s highest.<sup>510</sup>

Iraq’s economy in 2012 was dominated by the oil sector. About 98% of the country’s foreign exchange earnings come directly from the sale of crude oil. Because the oil sector provides only 1% of the country’s jobs, unemployment—estimated to be well above the official rate of 15%–18%—is a significant problem.<sup>511</sup>

The precise impact of the \$1.8 billion the United States spent to revive the non-oil sectors of Iraq’s economy is difficult to assess because there was little follow-up documentation available to measure its effectiveness. More than nine years after the start of the reconstruction program, Iraq is still far from having a vibrant, market-based private sector. A March 2011 IMF review of Iraq’s economy projected Iraq’s non-oil economy would produce just over 1.6% of the country’s exports

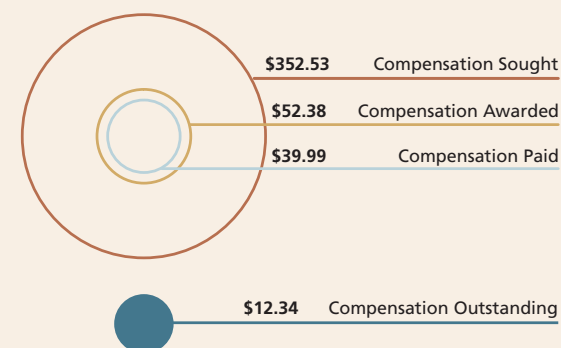
in 2012.<sup>512</sup> Fundamental structural impediments—vis-à-vis an entirely state-owned oil sector afflicted by corruption—make it unlikely that Iraq's non-oil economy will see much near-term expansion.

Corruption and debt payments reduced the amount of GOI capital budgets available to support initiatives to broaden the economy beyond oil. More than two decades after Saddam Hussein ordered Iraqi forces to invade neighboring Kuwait in August 1990, the GOI continued to pay compensation equivalent to 5% of its oil revenues to those who suffered personal or property loss as a result of the military action. According to the United Nations Compensation Commission, the GOI had paid almost \$40 billion in claims as of January 2013. A total of \$12.34 billion in approved claims still remained to be paid, mainly to Kuwait petroleum industry entities.<sup>513</sup> Figure 5.27 shows the status of Iraq's payment of the UN-mandated international claim. 🌐

FIGURE 5.27

### Status of Processing and Payment of International Claims Against Iraq, as of 1/2013

\$ Billions



*By October 2012, Iraq had paid nearly three-quarters of U.N.-mandated claims related to Saddam's 1990 invasion of Kuwait.*